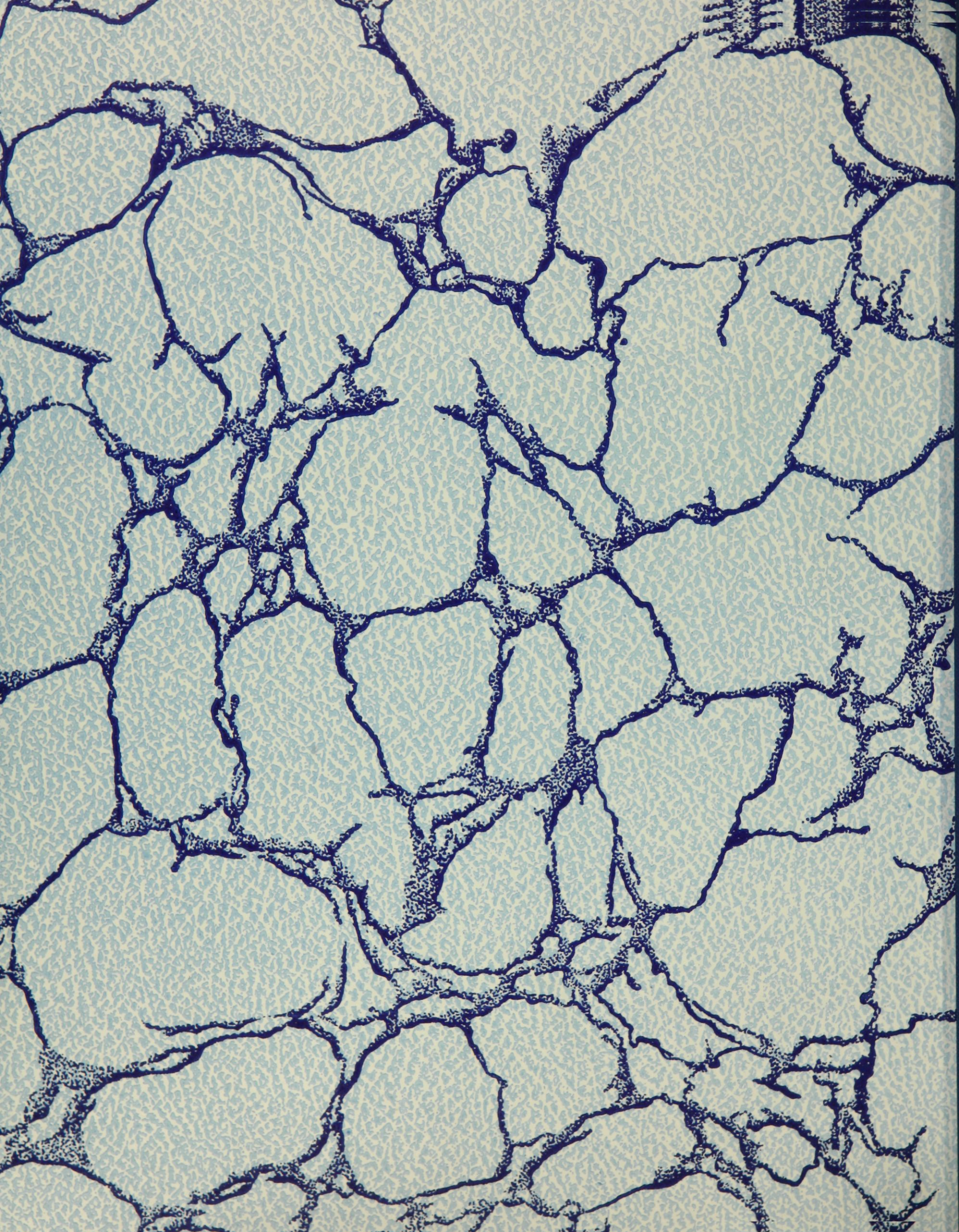
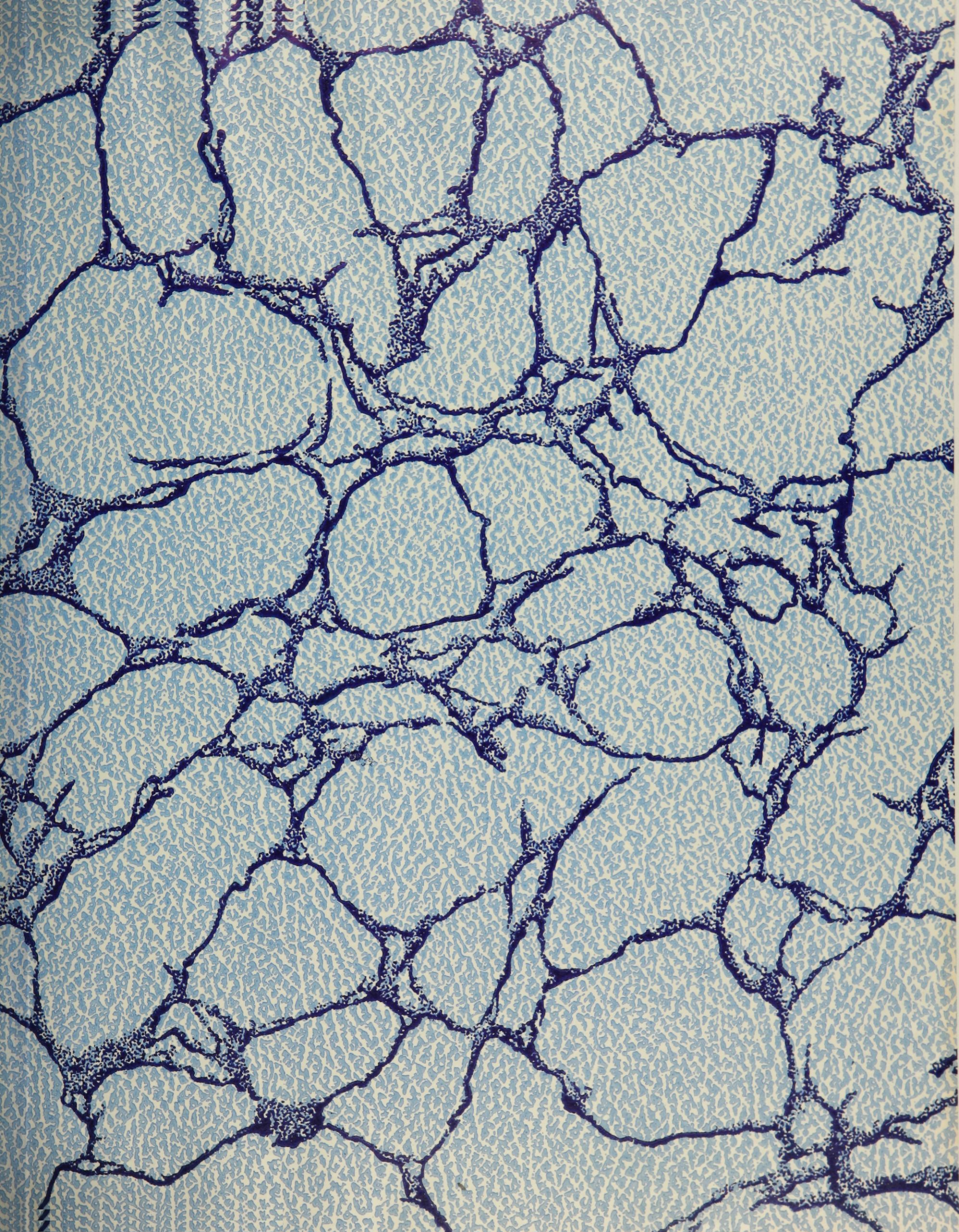


A QUEENLY COLONY.















# A QUEENLY COLONY



PEN  
SKETCHES  
AND  
CAMERA  
GLIMPSES







# Dedication.

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TO HIS EXCELLENCY

THE RIGHT HONOURABLE

LORD LAMINGTON, G.C.M.G.,

GOVERNOR OF QUEENSLAND.

My Lord,

WHILE I cannot refuse myself the indulgence of availing myself of the permission accorded to dedicate this work to Your Excellency, I am fully conscious that I may thus appear to assume for the production an importance which its contents do not justify. The text has been written simply to accompany and explain photographs in the possession of your Government, illustrative of various phases of colonization in Queensland. The engravings which form the attraction of this slender volume are reproductions of a selection from among these photographs.

In executing this slight literary sketch I have found to grow under my pen, while following, I think, strictly the line of temperate description, the picture of a community in the enjoyment of great natural opportunities, and in which industry and enterprize, steadfastly exerted, must avail to reward the colonist with, at least, a modest comfort and a decent provision for his old age.

Were I conscious of having, in any degree, distorted this sketch, either by exaggeration of the advantages or diminution of the difficulties which attach to the pursuits of colonization in Queensland, I should have shrunk from exposing myself to certain detection by thus inviting the particular scrutiny of a Governor who has, during his term of residence by frequent journeys, even during the most trying seasons, to almost every part of this vast territory, acquired so intimate an acquaintance with the pursuits and conditions of the colonists, as has Your Excellency. It is in the hope that on your return to your ancestral home in Great Britain you may feel warranted in offering, as containing reliable information, this little book for perusal by friends desirous of learning something respecting the Colony over the destinies of which you for years presided, that this dedication is respectfully tendered by

Your Lordship's

Obedient Servant,

WILLIAM HENRY TRAILL.

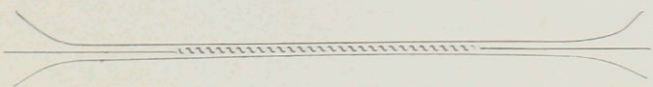
Brisbane, 1901.







## INTRODUCTION.



THE following sketch, outlining some of the principal features of colonization in Queensland, originated in a desire that a number of photographs in the possession of various Government departments should be reproduced by photo-engraving and made available for wider distribution than had been possible by multiplication of silver prints. Some accompanying explanatory letterpress was required, and I was favoured with a communication suggesting that the writing should be furnished by me. The inadequacy of detached bits of description, appended each to a picture, to engage attention was recognised, and my commission took the form of an engagement to furnish a sketch in a more connected form, embodying, where feasible, digressions into narrative and tradition which might serve to impart some degree of personal interest to the sketch, while not too widely deviating from the original purpose of publication. The space permitted has been too limited to permit of anything like a comprehensive work. Several settlements of considerable relative importance have not been referred to at all, generally because no suitable illustrations have been available. Although many places have thus been passed over, it has been a prime object not to omit any leading feature of the progress of settlement in the enormous territory comprised within the boundaries of Queensland.

Since the work was commenced, and, indeed, after it had been considerably advanced, the accomplishment of Australian Federation has conferred the style of a "State" upon the territory. But, as it remains essentially a Colony, it has not been thought requisite to alter the title of the work.

The photographs reproduced are mainly from the collections of the Railway, the Lands, and the Agricultural Departments. Some, however, I have obtained from other sources. The Police Department has favoured me with several, and for some of those illustrating artesian bores I am indebted to the courtesy of the firm of Morehead's Limited, stock and station agents. Several of the headings are from the brush and pencil of Mr. F. Elliott, of the Government Printing Office, by which establishment the printing has been executed. The reproduction of the photographs, &c., has been accomplished by Messrs. W. and J. Traill.

Materials for the text have been derived in part from a long personal acquaintance—commenced in the year 1861—with Queensland, in which Colony I have passed most of my early manhood; and in part from every accessible publication, including all official statistics, and so forth. My indebtedness in these respects is so universal that only a general acknowledgment can cover it. I believe I have read and made some use of every work of private authorship which has been printed relating to Queensland.

W. H. TRAILL.







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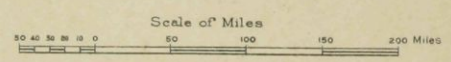






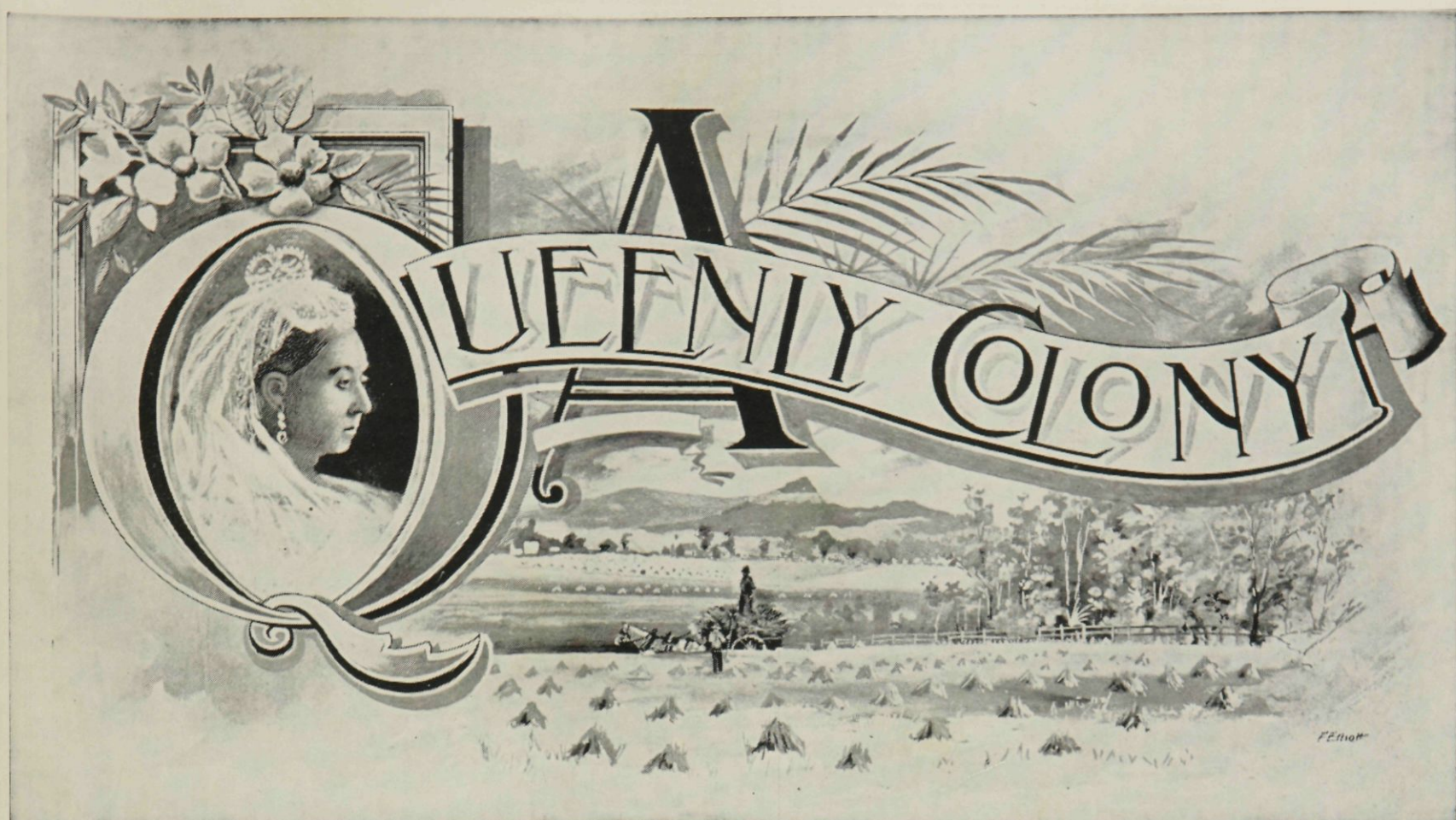
# QUEENSLAND

Shewing the  
MAIN DIVIDING RANGE  
AND MINOR WATERSHEDS  
also the  
PRINCIPAL RIVER SYSTEMS, RAILWAYS,  
TELEGRAPH LINES & TOWNS  
1901.



Revised by A.M. Walker





**COMBINE** the territories in Europe of France, the German Empire, Belgium, Holland, and Spain. Extinguish the populations: obliterate every trace of their industry and that of past generations. Let scattered tribes of aborigines of the Stone Age ramble amidst forests, thickets, plains, swamps, mountains and downs. Let the climate range from temperate to tropical. Then early in the nineteenth century introduce a few score adventurers—modern successors of Abraham and Lot—seeking simply pasture for their flocks and herds.

The conception is no extravagance of the imagination. It portrays the territory and condition of what is now QUEENSLAND, three-quarters of a century ago. In one corner, indeed, there was a tiny rubbish heap, where the moral scavengers of a distant State had flung some of their human refuse. Happily this was but a transient pollution. Less than a score of years later the offensive matter had been raked up, loaded on vessels, and conveyed back to the place whence it last came.

Private enterprise entered what is now Queensland, by an overland route, screened from the contamination of the tainted depot which marked the attempt by organised authority to turn to use the vast territory, by a range of mountains formidably scarp'd on their seaward side.

The Earth has abundance of unpopulated tracts—territories desert or deserted. There appears to be no physical rule governing the distribution of population, except the influence of extreme cold in the two polar regions and the repelling barrenness of sandy and waterless tracts such as the Sahara. But Australia, of which Island-Continent Queensland occupies the north eastern portion, is neither desert nor deserted. Yet until the closing years of the last century it could scarcely be regarded as included in the world's political geography. Even to-day, in the last year of the nineteenth century, it supports a less population to the square mile than the upper regions watered by the Amazon, than the desolate plains of Mesopotamia, than the steppes which skirt the Ural Mountains; than some parts of Siberia and all Turkestan.

Between Australia and most of these regions there is a striking distinction. With few exceptions the latter are places deserted because deserted, arid and unproductive because human industry has ceased to tend and fructify them. The forest and jungles of the Upper Amazon disclose to the adventurous explorer titanic remains of mighty cities, of gorgeous palaces and stupendous temples; traces of immense cultivation by nations or races of whose very existence these relics are the sole records. The plains of Mesopotamia surround the ruins of Babylon and the remains of Nineveh, and along the banks of Tigris and Euphrates every mound conceals fragments of inscribed bricks, of sculptures, or splinters of utensils of domestic use. The investigating eye can there detect in all directions the lines of irrigating channels which once imparted perennial fertility where now only an annual crop of grass is yielded by the thirsty soil. Even in Africa—the most mysterious of continents, the fabled home of “Anthropophagi and men whose heads do grow beneath their shoulders”—the whole northern region, along and behind the Mediterranean littoral, is studded with ruins of cities small and great, and indications of a once thronged and busy population; while in those southern portions latest made accessible to modern investigators, the fortresses and mines of colonists or adventurers whose identity it has yet been impossible to rescue from ages of oblivion, confront the surprised invader. Nearly every one of the world's waste places has been at some remote past period a scene of industry, a home of population, even a centre of grandeur, power, and splendour.

No such romantic interest attaches to Australia. Scientific men appear to agree that, geologically regarded, the continent is in a condition such as to make it difficult to determine whether to regard it as infantile or decrepit.

The territory comprised within the Colony of Queensland has an area estimated at 668,224 square miles. It is bounded on the south by a line starting at the ocean headland, named, by Cook, Point Danger, on account of the prolongation of the mountains which extends some miles eastward under water and constitutes a formidable reef. From this point the boundary follows the range of mountains to which Oxley



gave the name of Macpherson, in honour of the colonel of a regiment in Sydney, and in which range, plainly visible from the ocean, one great peak rears its head, and was aptly named, by Cook, Mount Warning, as indicating to the mariner his approach to the perils of the teeth protruding from Point Danger. A river, named at different parts of its course Severn, Dumaresque, and Barwon, is then followed to the 149th degree of longitude, from the intersection of which with the 29th parallel of S. latitude the latter is followed for seven degrees. The boundary then strikes north along the 141st parallel of longitude to the 26th of latitude; follows that to the 138° of longitude, which forms the frontier line to the waters of the Gulf of Carpentaria. Those waters, Torres Straits, and the Pacific Ocean are the boundaries to the starting point.

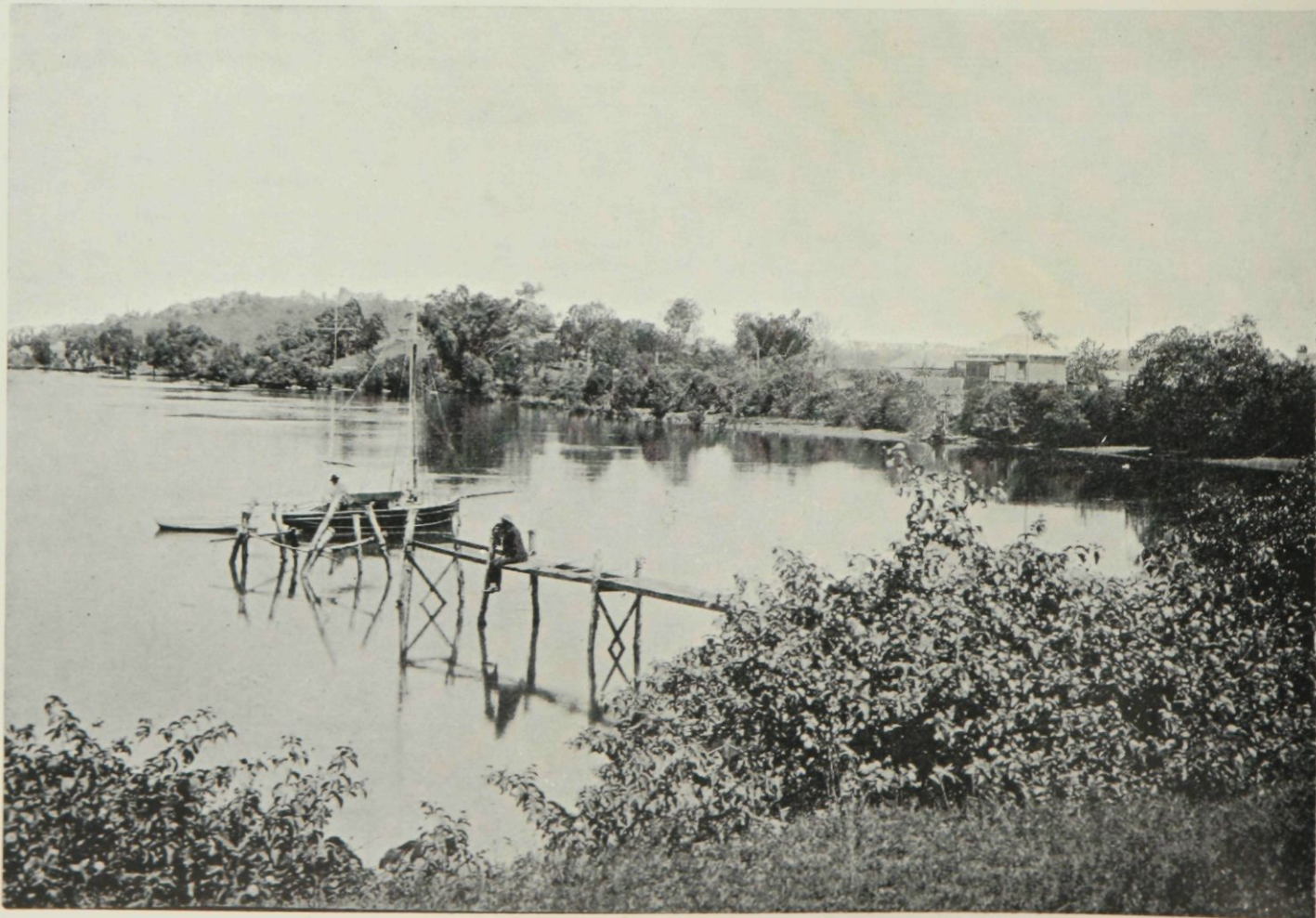
The Colony is by Nature divided into two portions essentially differing, one from the other, independently of the climatic gradations due to the great range of the territory, North and South. A wall of mountains, not indeed of formidable height but marking decisive geological contrasts, runs parallel with the Pacific coast and separates the smaller coastal region from the more extensive tract lying towards the interior. This barrier, most irregular in its course, but yet maintaining a general direction N. and S. now approaches, now recedes hundreds of miles from the seaboard. Where it is most distant, however, supplementary ranges, having the same general trend, in most cases, uprear themselves at no great distance from the seaboard. The moist breezes from the Pacific condense on striking these hills, and originate a number of water-courses, which in groups unite to constitute coastal rivers. Neither the mountains nor the rivers which have their origin on their slopes can be said to be of imposing dimensions, as compared with those of any other continent. As the rivers approach the ocean their channels are in one or two instances of respectable dimensions.

But these are scooped by the occasional torrents of floods in seasons of exceptional rainfall, through innumerable ages. Than the Brisbane River, which was conjectured, not altogether unreasonably, when first discovered by Lieut. Oxley, Surveyor-General of N. S. Wales, to drain a vast portion of the Eastern interior of the Continent, there are few rivers more considerable, and none much greater, discharging into the ocean further north; and indeed on the whole Eastern Coast of Australia, only the Clarence River in Northern N. S. Wales is strikingly superior in volume. Yet it is a poor boast when we congratulate ourselves that at the part where the Victoria Bridge spans the

Brisbane only 20 miles from the embouchure, the river is as wide as the Thames at London Bridge. It may be confessed at once that not one river on the East Coast of Australia is navigable for vessels of burden a single mile beyond tidal influence.

One consequence of this severance of the territory is that the rainfall is unequally distributed. The tracts lying between the Pacific and the Dividing Range have the advantage of more frequent showers than the regions trending from the same range towards the centre of Australia. In the more northern portions of the Colony tropical conditions modify this inequality, as there are to a certain extent regular recurrences of a rainy season.

But, broadly regarded, and making particular exception of the Darling Downs, the Dividing Range marks a line of separation between districts suitable for agricultural settlement, and regions as yet available only for the depasturage of stock. In the former, the creeks are frequently running streams. In the latter, such a condition is exceptional and very intermittent. Alternations between vast torrents of flood waters, and stagnant pools at long intervals, characterise the water-courses. The coastal districts, sloping towards the Pacific, as contrasted with those inland from the Dividing Range, although presenting infinite variety, may be described generally as forest country of irregular surface, and intersected by innumerable minor ranges of hills and by water-courses, some constantly running, and others mere chains of ponds, save after heavy rains. All are liable to floods, which in the lower portions of the creeks, where numerous channels have converged, become excessive and submerge the fat alluvial flats. These portions of the territory have attracted, and will, until some method of irrigation on a comprehensive scale shall have been discovered to neutralize the frequently prolonged droughts which afflict the western interior, continue to attract agricultural settlers,



View on the Brisbane River.





DARLING DOWNS—Cultivated Lands, Emu Vale.

and persons who are desirous of either combining agriculture with grazing, or of carrying on pastoral pursuits on a smaller scale than the "squatter" of the past and present.

The course of land legislation has steadily followed the requirements of increasing population, tempered at first, while the pastoral lessees from the Crown held a prevailing influence in politics, by what they conceived to be their interest. The first concession to a demand for areas for agricultural uses was a grudging provision of specific areas, cut out of the squatting leaseholds, and in some cases chosen with less regard to the intrinsic fitness of the land than to the degree of disturbance which their severance would inflict upon the pastoral leaseholder. The inadequacy of such provision made itself apparent as population increased by an active system of assisted immigration in the early sixties. In 1868 a much more extended and liberal provision was made by a new Land Act, which satisfied in the fullest degree the desires of the class from which settlers are derived, and at the same time was not altogether disliked by the squatters who were most affected thereby, and the keener of whom, with the counsel of astute legal advisers, saw their way to convert to their own ultimate advantage provisions which, superficially regarded, appeared to deprive them of half their holdings. Warned by the pernicious results of a

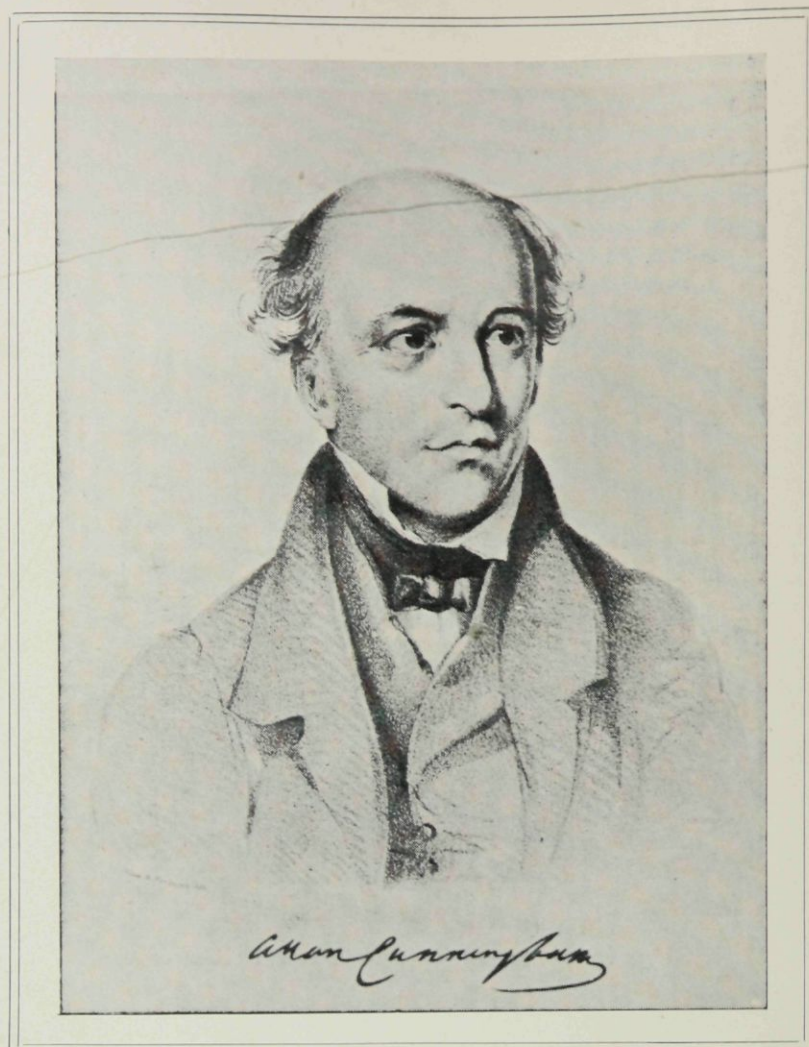
wildly extravagant Free Selection Act, fathered by the late Sir John Robertson in N. S. Wales, and which threw open to selection in small areas the whole territory of that colony, the Queensland Legislature restricted the operation of its new law to certain specified districts, particularized as already comparatively "SETTLED," and, with the single exception of the Darling Downs, all on the coast side of the Dividing Range. This system was adopted professedly to ensure comparative concentration of settlement. But the full realization of this advantage, and indeed of really adequate residential occupation, was in greater part neutralized by an excessive liberality of terms, equally affecting areas permitted to one selector, the prices fixed, the substitution of residence by agent in lieu of personal residence, and the sort of improvements stipulated for. By ingenious perversions of the law, and in some instances by audacious perjury by "dummy" selectors who made sworn declarations that they did not select on behalf of other persons, immense estates were secured in fee-simple by individuals and corporate bodies. The rich lands on the Darling Downs especially were appropriated in this fashion. Still, a very considerable amount of genuine settlement was effected. Even in instances where excessive areas were secured by individuals or corporations there was some benefit to the Colony. Capitalists from the Southern Colonies acquired tracts of downs country, and introduced more enterprising methods of



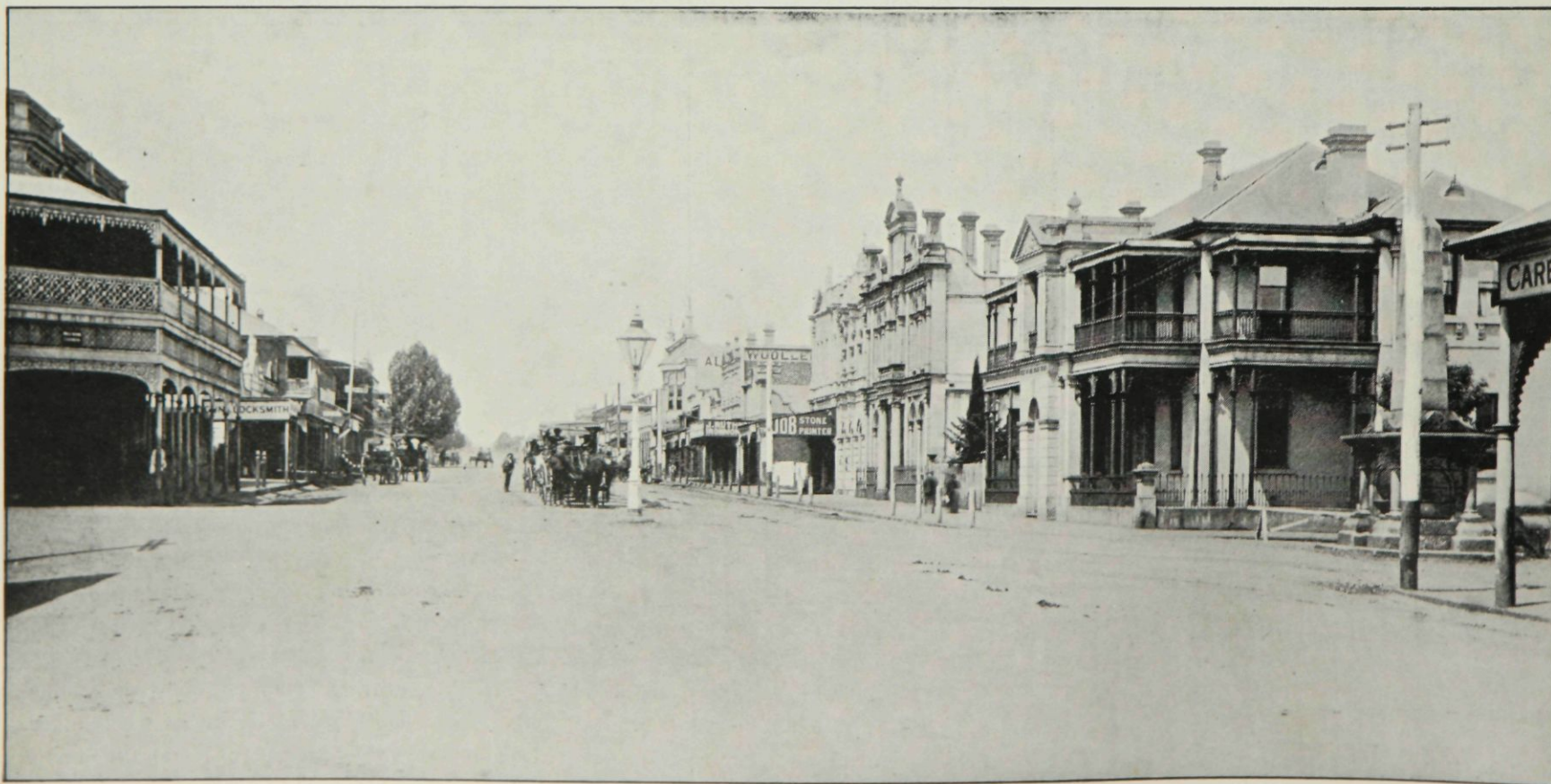
turning them to use. Where the pastoral lessee had been content to use the natural grasses, the new comers inaugurated a system of extensive cultivation. Great fields of perennial green fodder, such as lucerne, were sowed. Wells and tanks were multiplied, and wind-mills to raise water erected. The carrying capacity of the Darling Downs, which had been slowly deteriorating in consequence of the gradual extinction of some of the more delicate herbs and varieties of grasses, was restored, and perhaps increased.

But in the long run the operation of the Act was found to militate against the prime object, close settlement by active farmers; and it has now been found necessary, in the public interest, for the State to repurchase, by virtue of special enactment, at vastly enhanced prices, some of the choicest of the Darling Downs freehold estates, which were alienated under the Act of 1868. Thus reacquired, these are subdivided, and again disposed of to farmers in moderate areas, on terms, which, while not oppressive, suffice to reimburse the State for its outlay. The process will no doubt be extended to other properties, and is not being confined to one part of the Colony, so that the land-seeker of to-morrow will have opportunity of possessing himself of a homestead on country which has from the first discovery been regarded, and is still regarded, as the cream of the Colony of Queensland, and perhaps of Australia.

The Darling Downs, discovered by the celebrated Allan Cunningham, Botanist and Explorer, in 1827, and on which Patrick Leslie was, a dozen years later, the first pastoralist to settle, is a tract of somewhat over four millions of acres, of lovely rolling downs and open plains, with soil of unsurpassable fertility, derived from the degradation of volcanic rocks, chiefly basalt, and sufficiently diversified by gentle forest ridges and belts of scrub, over all of which picturesque detached hills, generally flat topped, protrude. The *ensemble* produces scenery of exquisite and placid beauty. The head-waters of the Condamine River, ultimately reaching the Southern Ocean, thousands of miles away, in the Great Australian Bight, traverse this area. But the channels are too far apart to furnish adequate supply of readily



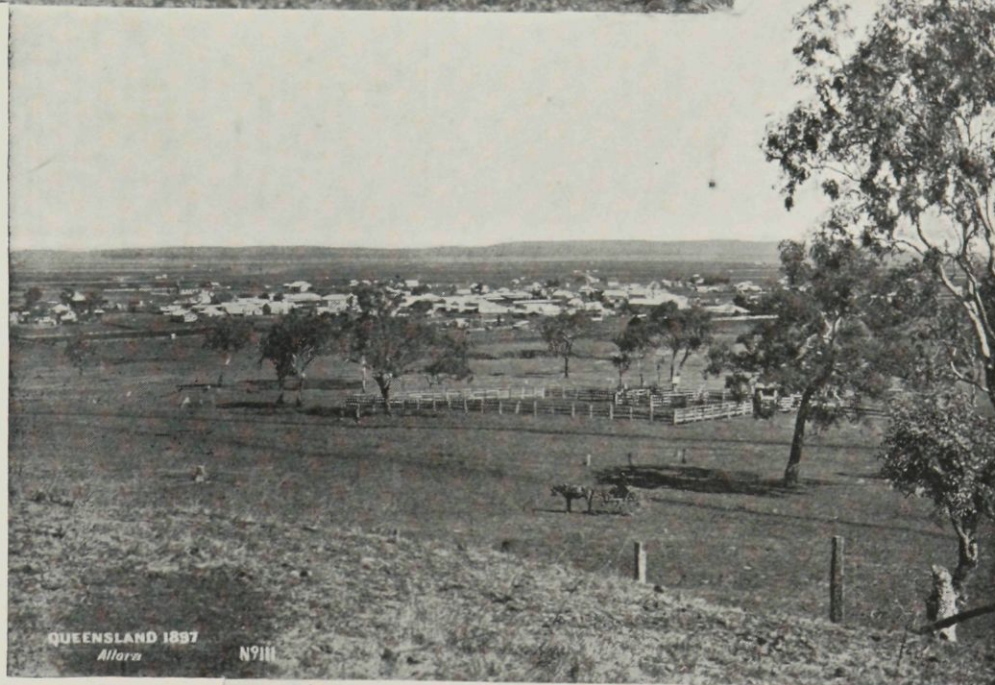
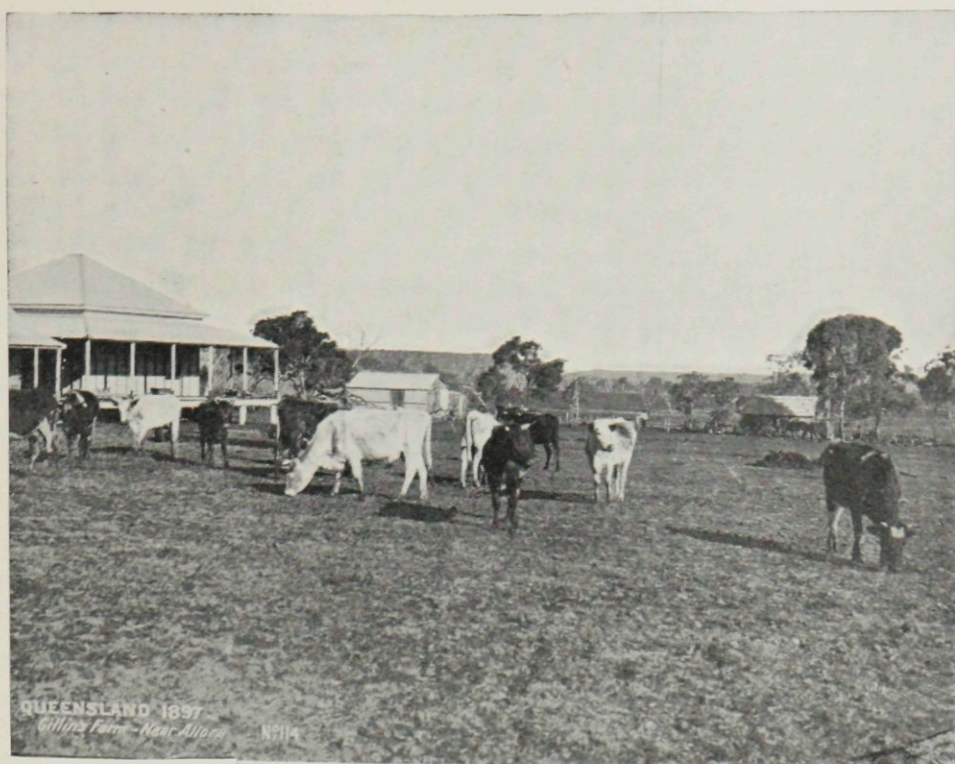
accessible water for the enormous flocks and herds which the country is capable of supporting, and it has only been by artificial surface reservoirs and wells that the full benefits of the stock-carrying capacity of the district have been enjoyed. In 1841, according to one of the



Rathven Street, Toowoomba.



pioneers, "There was but one hut of wood and bark, on the whole Darling Downs." That was at Toolburra, the head-station of Patrick Leslie. Now, there are on the Darling Downs three considerable towns Warwick, Toowoomba, and Dalby, besides a number of villages. The development of these centres has of course corresponded with the growth of population on the surrounding country. So long as grazing was the sole use to which the fat lands of the Downs were put, the number of people was small, and the towns were unprogressive. The appropriation of areas for agriculture, early in the sixties, gave them their first genuine impulse, and Warwick and Toowoomba began to expand; the latter altogether leaving behind it the earlier hamlet of Drayton, which had grown up around an inn built there by Orton, or Horton, a pioneer who had come to the Downs in the employment of Mr. Stuart Russell, a gentleman who formed the station of Cecil Plains, and whose book "THE GENESIS OF QUEENSLAND," published shortly before his death in Sydney, within the last ten years, gives, in a quaint fashion, an invaluable sketch of the earliest days of pastoral settlement on this portion of Queensland. Drayton was first known simply as "The Springs," and Toowoomba was "Drayton Swamp," or, curtly, "The Swamp." Laid out on a plan designed when the narrowness of the streets of Brisbane and Ipswich—results of Sir George Gipps' lack of prescience—had already provoked cavil, Toowoomba is a town of noble proportions as regards its avenues, and is thus adapted for the greatness which appears to be its assured destiny in the future. Planted within a mile of the rim of the great plateau, nearly 2000 feet above the sea level, the town has a climate markedly cooler than that of Brisbane. Its proximity to the edge of the steep eastern escarpment of the Main Range affords unrivalled opportunities for locating suburban residences commanding views of immense extent and singular attractiveness. The principal business avenue, Ruthven Street, extends along level ground with a length practically unlimited, as the street gradually changes its character, while continuing its direction from a busy centre of exchange and affairs to a country road. Our illustration



sufficiently portrays its present appearance, but will probably become after the lapse of another quarter of a century an interesting curiosity for comparison with the Toowoomba of that time. It is not so much because the town is placed where a trunk railway from the metropolitan seaport branches, two principal limbs pointing, one southward and communicating with a chain of towns in N. S. Wales, Victoria, and South Australia, including the capitals of these colonies, and the other directly west to the interior, as because the immediate

surroundings are daily expanding in respect of population, tillage, and consequent wealth, that Toowoomba is today growing with striking rapidity. The population, which, forty years ago, was but about a couple of hundred, and in 1886 had risen to little more than 6,000, with



rateable property valued at £51,000, is to-day, including Middle Ridge, which is, and Drayton which is almost, a suburb, about 15,000, while the rateable property is in round numbers, in Toowoomba, £600,000, in Middle Ridge £106,000, and in Drayton £64,000—a total of £700,000. It will thus be seen what a prodigious acceleration of population and wealth has ensued during the last fourteen years as contrasted with the progress during the preceding quarter of a century. The later and shorter period was a term of settlement on and development of subdivided areas; whereas the earlier period was one chiefly of great leaseholds and estates used for the depasturage of stock. It is well worthy of remark that, during the later period, the sheep and cattle depastured in the Toowoomba district increased, notwithstanding the enclosure for cultivation of large areas, and in consequence or in spite of (as opposing theorists contend) the transfer of extensive portions of the runs from large holders to smaller owners, from 21,087 cattle and 542,636 sheep in 1885 to 51,405 cattle and 627,340 sheep in 1898.

Towards the Southern margin of the Downs country, and not far from where Cunningham first entered this now celebrated tract, stands the town of WARWICK. More fortunate than Toowoomba, which is planted on a fat chocolate soil, which is churned to adhesive red mud in wet, and ground to an all-pervading red dust in dry, weather, Warwick was laid out on a patch of gravelly-shale. It has thus, during the earlier stages, when in young townships a street is no more than a bush road confined by buildings and fences, and torn by a concentration of traffic, had the credit of being a clean little town. Having on three sides some unsurpassable lands for any purpose whatever, with an elevation about 500 feet higher than Toowoomba, and a rainfall equal in quantity and frequency, and being favored in addition with mineral lands close at hand, Warwick with its population of over 4000 is one of the pleasantest places of residence in Queensland. The Darling Downs, everywhere lovely, except perhaps here and there where they partake too much of the character of plains and give an impression of monotony, have no more lovely tract than that



The Town Hall, Warwick.

Warwick, from a distance.

which lies in the neighbourhood of Warwick, of portions of which our illustrations, showing scenes near Yangan, Emu Vale, Freestone and Swan Creeks, may serve as examples.



Although Warwick is a town of solid prosperity, and has made amazing progress since agriculture began to replace, on a considerable scale, grazing, it is plain that the future—even the immediate future—promises for the town and district progression still more rapid and a growth of population, of settlement, of production, and of wealth, which will ere long make its present flourishing condition appear inconsiderable by comparison. The very marked success which has attended the plan of resumption by purchase on the part of the Government of parts of the freehold estates hereabouts, as elsewhere

initiated. Thus opportunities have been provided to suit men with a good deal of money, men with but a few hundreds, men with very little, and men with no capital save a character for trustworthiness and industry. Thus, for example, on Canning Downs, over 20,000 acres have been disposed of by the proprietor on prepayment of one-fifth to one-fourth the price arranged. The Government bought from another run, Glengallan, at between £3 and £4 per acre, size of parcel being 10,000 to 11,000 acres, and exacts from the retail buyer of a farm only sufficiently high price to cover interest and cost of administration



Warwick, from Waterworks.

on the Downs, and the resale of such lands in suitable sections, and on the instalment plan, to farmers, point to repetition of the same process. Again, the owners of the big estates, recognising that their own advantage might be better served by direct dealings with land-hungry people, piecemeal, than by wholesale transactions with the State, have, in many instances, themselves subdivided portions of their property, and sold to intending farmers. In other instances a system of renting farms to tenants with provision by the landlord of financial help to tide over the first period of outlay and effort has been introduced, and again a plan of profit-sharing has in some cases been

during the twenty years that he is acquiring the fee-simple by payment of a quit rent. When dealing with the squatter-squire, however, after payment of the deposit as above, the balance of purchase money in six successive annual instalments has to be paid, with half-yearly interest at 6 per cent. This is one arrangement; but, of course, it is but a specimen. The terms are differently cast by different proprietors, just as the prices of land vary with locality, convenience, and grade. Thus the choicest lands up Yangan way range from £10 to £15 per acre. The smaller holders put even higher valuations on their improved land.

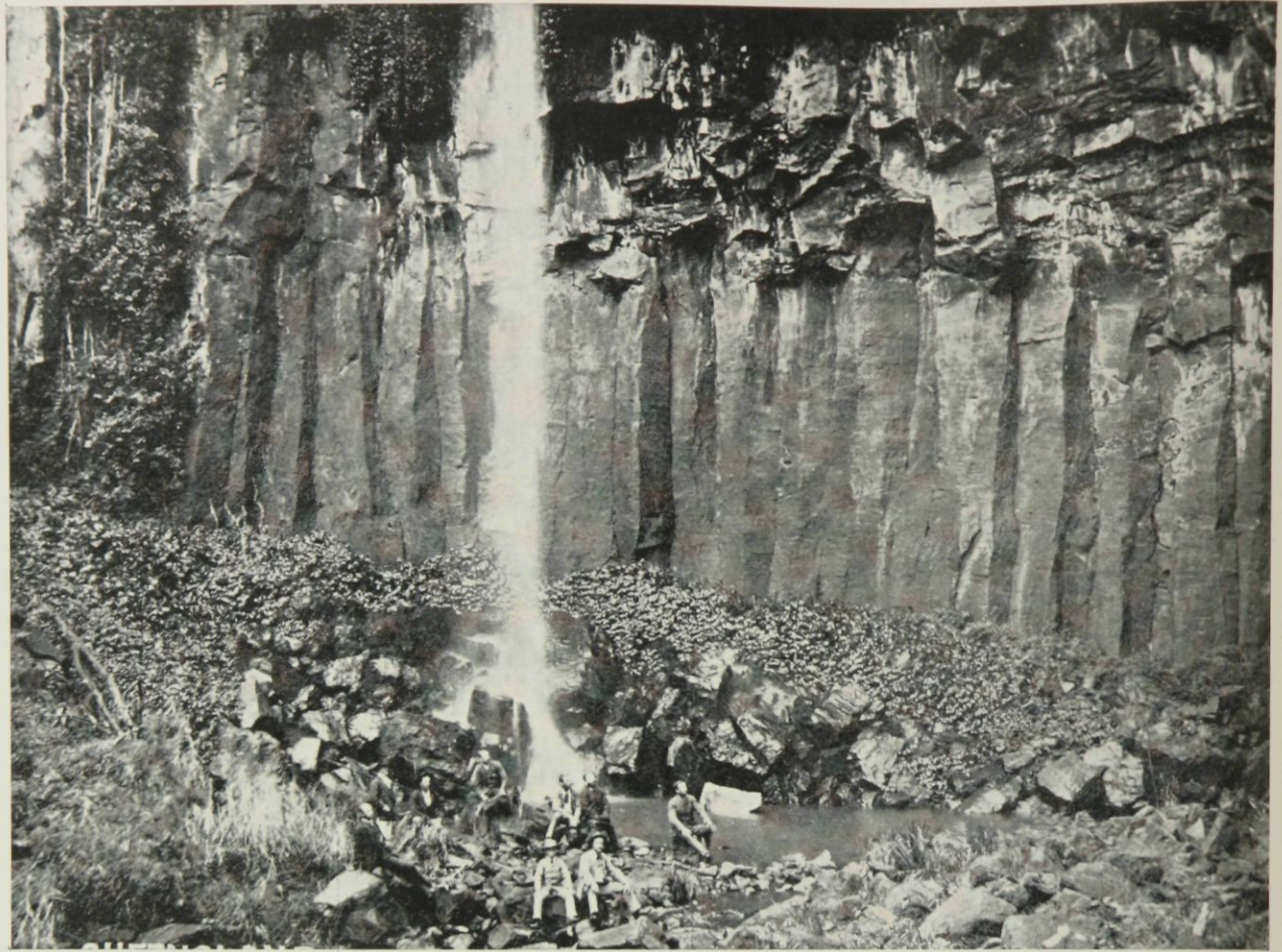


At Warwick, a branch line diverges from the main Southern Railway, running up an extreme head of the Condamine, penetrates to the Killarney Valley, one of the beauty-spots and favorite summer resorts in Queensland, nestling amidst the scrub and ferns of the Main Range at an elevation of very little short of 1700 feet, where perennial rills and brooks tinkle in little falls, rapids, and cascades, and a volcanic soil, in no wise inferior to the best of the Downs, has tempted settlers, when the available quantities of the open downs run short, to disregard the matted scrub, and with stout hearts and sharp axes to hew out for themselves here farms which are excelled in prolificness by none in all Australia.

The northern portion of the Downs has for capital the town of Dalby, on Myall Creek, another affluent of the Condamine, deriving its waters from that part of the main dividing range which bears the name of the Bunya Mountains, owing to the abundance of that pine-like tree which there has its habitat. This very handsome tree is to be found all along the range hence towards the coast, but deserts the main chain where it throws off a secondary spur, known in different sections as the Cooyar, the Coast, and the Blackall range, towards the ocean. Some well-grown specimens of the Bunya tree embellish the Brisbane Botanical Gardens, on the deep alluvium fringing the river, a situation entirely foreign to their native habit.

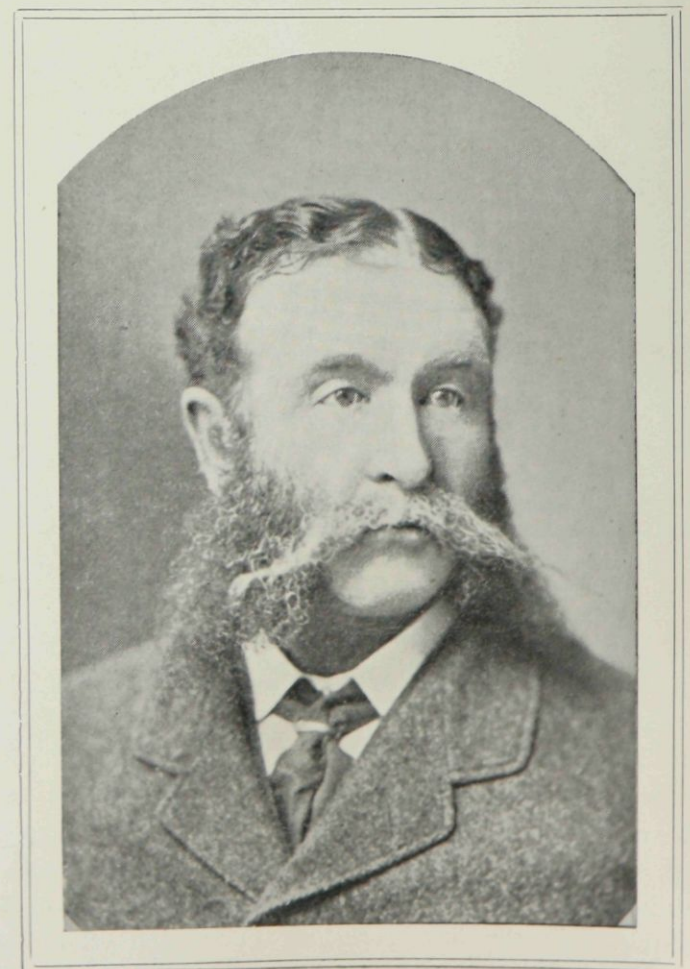
The comparative flatness of the downs in the vicinity of Dalby has occasioned the bestowal upon that township of the name of "The City of the Plains." The soil in this part, as in many other parts, of the Downs is black. Before the construction of railways and when tracks served for roads, the tenacity of this sort of soil hampered locomotion in quite a remarkable degree. It clogged the feet of men and the hoofs of animals, and it adhered to the wheels of vehicles, in the same fashion as does newly fallen snow. Indeed locomotion off the track, when the surface had been beaten to some degree of solidity, and sometimes along the tracks themselves, became after a few rainy days not only difficult but impossible. Wheels were converted into solid disks of sticky mould, which presently grew in width so as to pack the space between the wheels and the body of a vehicle and operate as a brake.

To the north of Dalby lies the Jimbour head-station, the estate itself originally fringing the town. Jimbour is one of the most highly esteemed stations on the Downs, being unsurpassed by any in the quality of its land; and happening to be traversed by the main roads from the coast, *viâ* Toowoomba, to the Burnett and Maranoa districts, its excellences thus came more under observation than those of other runs of equal merit. It was a station before there was any settlement at Dalby. At Jimbour, Leichhardt organised, and thence led forth, his first and second exploring expeditions. Adjoining it on the East lies Cumkillenbar run, comprising a mass of scrubby spurs descending from the Bunya range, interspersed with well-watered narrow



KILLARNEY—Waterfall and Basaltic Columns.

valleys, and having a fringe of open and forest land merging into the downs country. It was on a portion of this fringe that earlier in the sixties a few thousand acres were made available for settlers, in

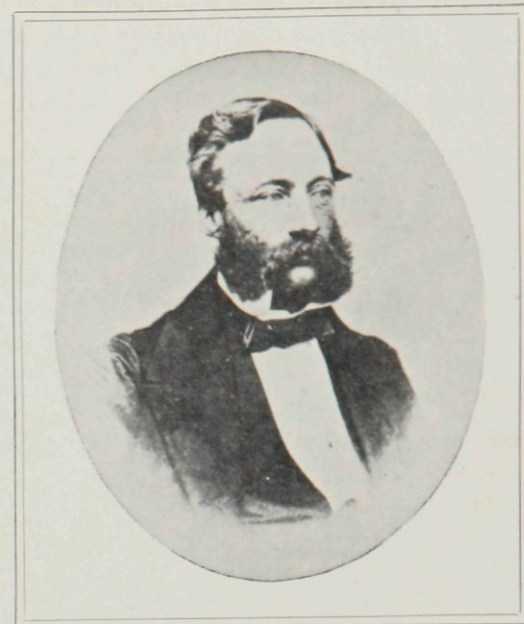


THE LATE SIR JOSHUA PETER BELL, K.C.M.G.

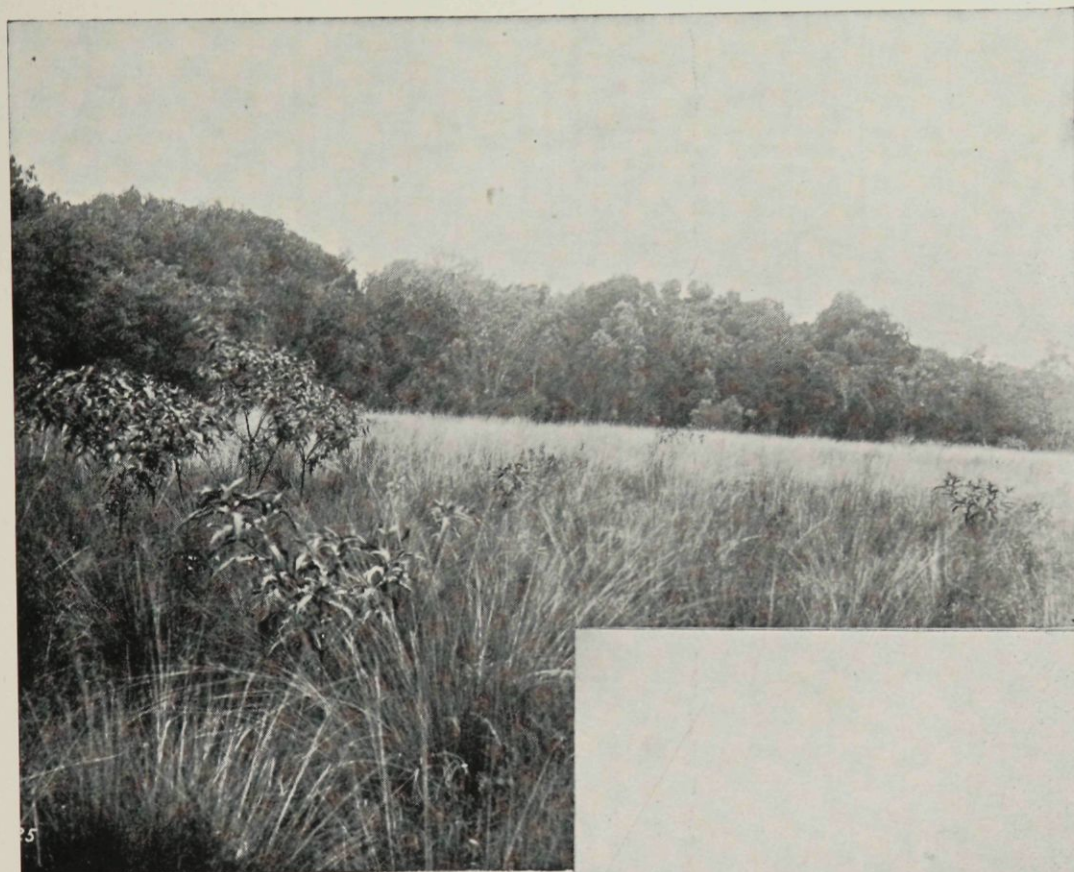


small areas, and eagerly appropriated. From such a settlement it was hoped that Dalby might have benefited. But the isolated situation of the group of farms and other drawbacks militated against the success of the farmers, and after years of up-hill efforts their holdings one by one fell into the hands of the proprietors of Jimbour, who had become the holders of the Cumkillenbar run also, on the demise of De Lacy Moffatt, lessee. The Bells, proprietors of Jimbour, and the Moffatts at one time were prominent in public affairs in Queensland. De Lacy Moffatt held the office of Treasurer, in succession to Mr. R. R. Mackenzie, afterwards Sir Robert Mackenzie of Coll, in the first Ministry of Queensland. Joshua Peter Bell held the same portfolio in the succeeding Administration of Mr. Macalister, and continued to maintain an eminence in public affairs during his life time, acting as Governor during the absence of Sir Arthur Kennedy in 1880.

Both these gentlemen were fine examples of a class common among the pioneer squatters of Queensland. The Bells of Jimbour were Australian born, sons of a Government Commissary of Sydney in Governor Macquarie's time. Mr. De Lacy Moffatt was from the old country, of good family and social antecedents. These neighbouring squatters were close friends; alike polished in manner and large in their ideas. Sir Joshua Peter Bell, who became the more prosperous, built, in 1873-4, the house at Jimbour head-station, designed on the scale of a country-gentleman's mansion in the English shires. This



THE LATE HON. T. DE LACY MOFFATT.



At the Edge of a Brigalow Scrub.

was a conception far ahead of contemporary ideas, and much sneered at by squatters of a different type, while deprecated by others as involving a misplaced expenditure, justifiable enough if the outlay had been reserved for the other side of the Globe.

The domestic architecture of Queensland colonists suggests itself here as a subject of some interest. With respect to the towns, our illustrations explain a good deal, and it is not necessary to say very much. Brisbane alone

had its beginnings in buildings erected at Government expense and mainly on official models. The structures so originating have now either altogether disappeared or in a lingering survival or two have been so disguised by alteration and addition that their first appearance has been obliterated. Collectively they were stamped with the impress of architectural ideas suited to the climate of Great Britain. The barracks for prisoners in what is now Queen Street, Brisbane, owed whatever degree of coolness they secured to the thickness of their walls of rubble masonry. These blank walls, unshaded by verandahs, were exposed to the full glare of the sun. The hospital and other buildings were of brick, and of one



SCENES ON JIMBOUR—A Fringe of the Downs.



story, with verandahs back and front; the ceilings were low, and doors and windows on the niggardly scale of domestic architecture of the Georgian era in England. The soldiers' barracks, of which photographs have been preserved, had, it will be noticed, no

of Queensland. Gradually, however, climatic conditions have compelled architects and owners to depart from conventional models designed for cool climates, and more airy construction, assimilating considerably to the Italian style, is steadily displacing the old English fashion of building, with infinite advantage as regards alike interior comfort and external elegance.

In the bush, the necessity for some sort of a house is productive, during the first stages of settlement, of quaint makeshifts. Travelling, tents are the only resource. But no man lives in a tent if he is not necessitated to do so. The miner, who cannot, when he first strikes a patch of alluvial or discovers a reef, be sure how long it will hold good, accommodates himself with the most makeshift sort of hut. Almost invariably there's bark to be got for the trouble of stripping it from the trees. A frame of saplings is easily erected, and when roofed with sheets of bark and the sides and ends closed up with the same material, with a shallow trench to turn surface water during rainy weather, he has a domicile which is cool in the hottest hours of summer and proof against the heaviest deluges of rain. Even when forming a station on wild country, where bark was easily procurable, a good bark hut



"OUR FIRST HUT"—Cooroora Station, Moonie River.

SAWN TIMBER. BARK ROOF.

protection against the daily heating by the sun. Their design was undoubtedly after a regulation model, and would have been fairly appropriate in Cork or Carlisle. The first private residence built in Brisbane is said to have been a cottage of sawn timber, with roof of wooden shingles, erected by a seafaring man, Captain Coley. Singularly enough this flimsy structure has remained in existence. The shingled roof has been covered with corrugated iron, and a mass of creepers conceals in part the proportions of the cot. But its general aspect can be perceived. With regard to business structures, which began to be built when the settlement was thrown open for free colonists, the influence of old-world models was overpowering, and is not yet quite obliterated. The early buildings, some of which, more substantial than the majority, still disfigure Queen Street, were smothering structures, with doors, windows and passages absurdly inadequate for the free and liberal ventilation essential for comfort in the long summer



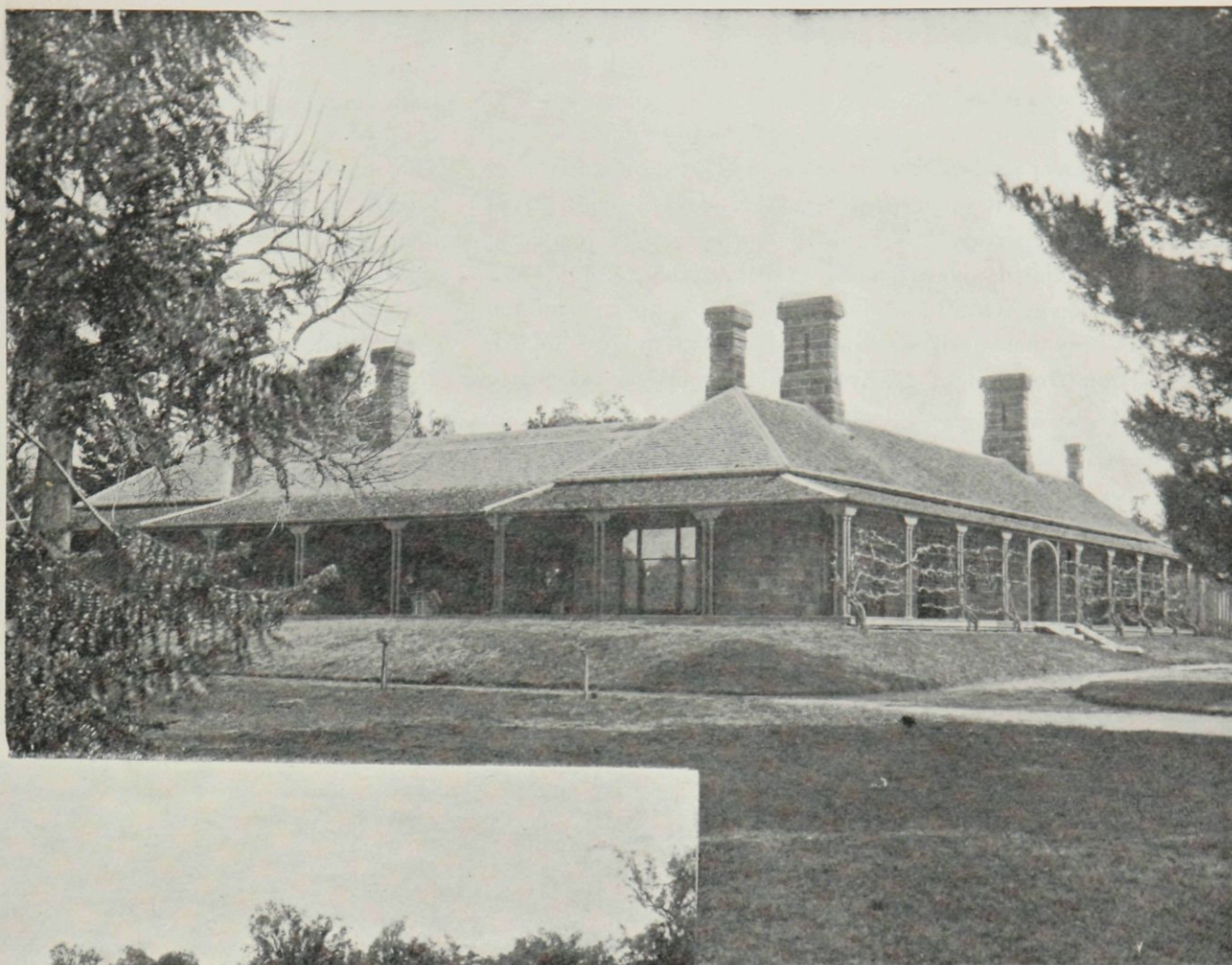
Stockman's Hut.

SLAB WALLS. SHINGLE ROOF.

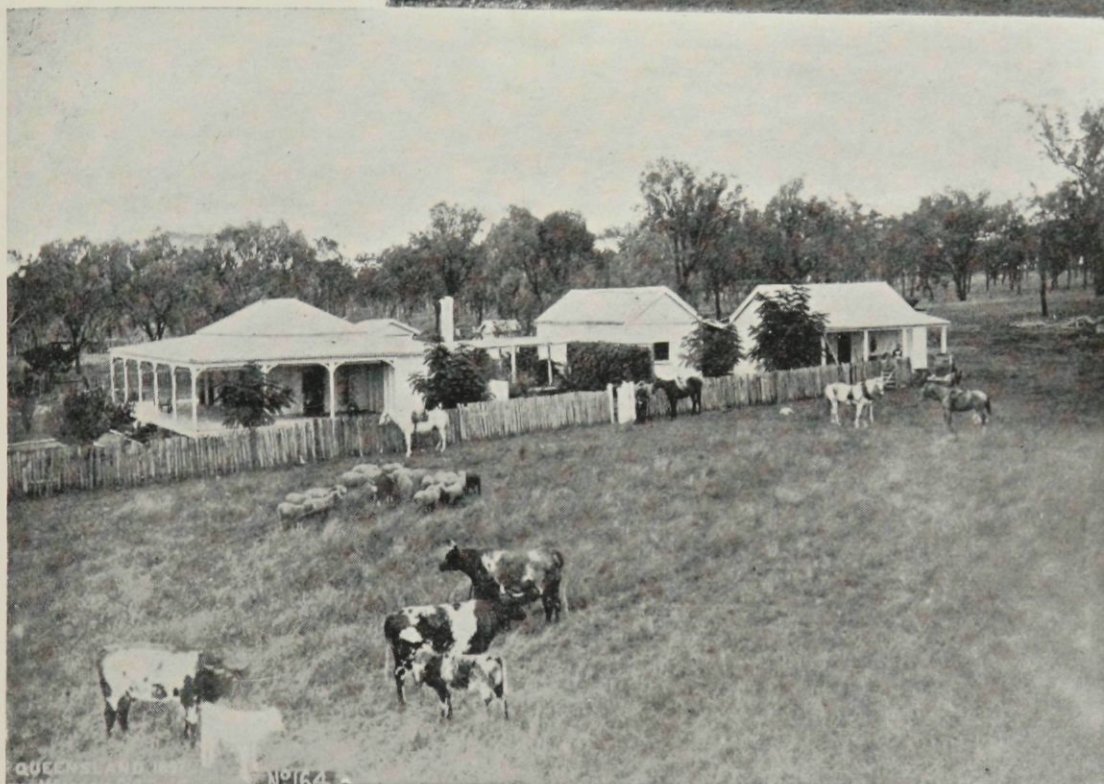


has been in multitude of instances the first head-station dwelling, and that most important of all structures on a sheep-run, the woolshed—necessarily a building of liberal dimensions—has been run up of “round-stuff” and bark. In like manner, selectors employed bark for their first home, wherever it came handy, and for all secondary shelters, such as barns, fowlsheds, and milking sheds, it will always be resorted to where it is plentiful and the settler’s wealth is more in his muscles than in his pockets.

The next progressive stage is represented by the slab building, roofed with bark or with split shingles. This makes a more symmetrical although scarcely a more comfortable hut. But this



Talgai Head-station House, Darling Downs.



Mr. D. McLean's Station, Redford, near Mitchell, Maranoa District.

material, with a frame of squared timber, can be employed in the construction of quite considerable single-story buildings. The material comes cheaper than pit-sawn boards, besides which bushmen who can split and trim slabs and square joists with the adze are numerous compared with those skilled in pit-sawing. Most of the earlier station houses and buildings, of the better sort, have been constructed of such materials; sawn stuff being used only for flooring. Such buildings are lasting, and when the walls and partitions have been lined with hessian and papered, thus intercepting draughts and deadening sound, like the tapestries of mediæval castle chambers, the comforts and decencies of home-life are fairly provided for. In fact, this has become the standard of station house building, and anything better indicates a degree of refinement, luxury, or pretension. Pioneer squatters, after years of make-shift in bark or slab hut, sometimes so appreciated the comparative comfort and elegance of a good slab cottage, that anything superior

seemed to them expensive superfluity. Others, again,—and unfortunately that class of owners does not tend to diminish,—as they accumulated wealth, came to regard their station in Queensland in the light of merely their factory, or business establishment, and fixed their aspirations after elegant comfort upon a mansion in the old country. A related cause of restricting the house-accommodation and home-surroundings on Queensland stations to the bare necessities for shelter and accommodation, is the fact that a considerable proportion of runs are now managed for financial institutions and absentee proprietors strictly as business establishments—places where profits are to be made; not homes where incomes are to be spent in outlays on comfort, or on tasteful embellishment. Many

a fruitful garden, once the charm of a squatter's homestead, blooming with flowers, festooned with grape-vines, and gracious with foliage, has gone to wreck after the bank, or the investment company, became its owner. A head-station home in Queensland is, as our illustrations show, often embowered in loveliness. Head-station buildings, on the other hand, whence the eye of a resident owner and the collective taste of a family, including the feminine delicacy and idealism, often present a scene of plain sordid utilitarianism. Even “the stately homes of England” would not long beautiful stand “amidst their tall ancestral trees, o’er all the pleasant land,” were they in any large proportion to be handed over to business-managers for residences, with strict injunctions to squeeze every possible pound out of the estates, fatten stud stock in the parks, graze sheep on the lawns, turn the timber to profit, and waste no money on any but reproductive expenditures, but remit the largest possible revenue to noble owners and worthy squires



resident in the Riviera. Of "tall ancestral trees" none yet wave their branches over even the oldest of the "stately homes" of Queensland. There has been scarcely sufficient time since the land was first invaded by European settlers for anything to assume ancestral dignity. Of the pioneer settlers few consolidated whatever material success they achieved sufficiently for their lineal descendants to continue in occupation of their properties. Again, of those who did achieve wealth, several, as above intimated, removed to Great Britain, there to enjoy and disburse their incomes. Of all the pioneers who took up runs in the Darling Downs, only one survives as owner of the station he founded, and he, Sir Arthur Hodgson, of Etonvale, resides, and has for nearly

Although one may look in vain for replicas in Queensland of the stately homes of England, on every hand are to be perceived the beginnings of successors to those cottage homes of England which, at the time when Mrs Hemans sang, existed "by thousands on her plains." The era of commerce and manufacture which has intervened has forced the English rustic into the factory towns, and exposed his homely dwelling to decay. Here, in Queensland, at the other side of the globe, liberal land laws, rewarding bucolic industry with farms in fee simple, are effecting that which George Canning—the unconscious sponsor, by the way, of the splendid "Canning Downs"—described as calling "into existence a new world



CANNING DOWNS—Black Swan Lagoon.

quarter of a century resided, in England. The Gores of Yandilla, of the third generation, are still squires where their grandfather St. George Gore settled down with stock. There is a Bell in the Legislature, but Jimbour is not his. What splendid fellows the pioneers of Queensland appear to us now! Perhaps it may be only the magnifying effect, which retrospection seems ever to have had, which invests them with heroic dimensions. "There were giants in those days" is a saying which is thousands of years old.

to redress the balance of the old." Although in England the institution of cottage homes is dwindling, although the small freeholder, the copyholder, the yeoman are being swept away, in Queensland the selectors' homes are springing up on every hand in the earlier-settled districts. As yet, for the most part, they present an inelegant aspect of staring and angular newness, and stand in the clearing which their owners' hands have created amidst forest or jungle, ungracefully enough. But it does not need long waiting in





Selector's Home.

EARLY STAGE—BLACKALL RANGE.

such a climate to embower a building with foliage, and there are examples sufficiently plentiful already of the beauty which may, from judicious plantation of trees for shade and ornament, or for profit from fruit, be imparted even to the plainest of dwellings, to give full assurance that ere long they will, in thousands, realise the poet's description, and peep forth through glowing orchards,

*Each from its nook of leaves.*

While the great freehold estates which have been accumulated, contrary to the spirit and intention of the laws under which they have been acquired, appear to promise the establishment of a resident squirearchy, as well as to threaten the mischief of absentee owners, those same laws in their unperverted operations are undoubtedly creating a numerous yeomanry. The crude land law, result of a compromise between the then dominant squatting influence and the growing power of an increasing proletariat, which, in 1868, made it easy for any man to secure a bit of land for a homestead, but also left it not difficult for a speculator to appropriate twenty, thirty, or forty thousand acres, has been progressively amended, periodically, until to-day it has become practically impossible for anyone to pervert provisions designed to settle the maximum of people prosperously on a generously calculated minimum of land, into a convenience for agrarian forestalling. In 1868, any one man was permitted to legally acquire by lease with right of conversion into freehold, over 7000 acres. To-day the maximum one man can secure the freehold of is 1280 acres, *i.e.* 2 square miles. The price may be anything from 10s. per acre upwards, as fixed by proclamation, and is adjusted according to the estimated value in the particular locality, by reason of natural fertility, and of accessibility. There must be continuous residence by the selector or his agent. That is to say, somebody must reside on the selection. But for the man who really determines that his selection shall be his home, the place where his own personal exertions and supervision shall win a livelihood, the encouragements are especially liberal. Although not all tracts proclaimed open for Agricultural Farms need be also made available for homestead selection, when an area is proclaimed open for either method, the man who is prepared to

undertake personal residence is given what are practically pre-emptive rights, and is, moreover, indulged with the easiest of terms while limited as to area. Should the land have been proclaimed at a value of not less than £1 per acre, for Agricultural Farms, the Homestead selector may appropriate up to 160 acres; if the land be proclaimed at less than £1, but not less than 15s., then the Homestead may comprise 320 acres; and if the price for a Farm be less than 15s., the Homestead selector can pick 640 acres: If, simultaneously, an area be applied for as an Agricultural Farm, and in whole or in part for a Homestead, the Homestead is allowed first pick. A license to occupy is issued to the selector, and at that stage the freehold of the land is practically secured to him, provided he is in earnest about it. He has to reside. He has to fence in his land within five years, or, as an alternative, to make substantial and permanent improvements equal in value to such a fence. In other words, if he puts up a decent bit of a cottage to shelter himself, it counts towards fulfilment of condition: a barn counts, a proper sort of fence round his cultivation counts, breaking up his first acre for cultivation counts, planting his bit of orchard counts; his cowshed counts, his milking bail tells; in short, every bit of useful work he does, in his own interest is effective as if helping to fulfil conditions. Generally, he'll want to get his fence up, but he must have a place to live in, and he must be turning the soil, or the grazing, to profit, somehow. That is really all the State requires of him. He must go on improving what is practically his own farm for his own benefit, until he has added to its value, according to what the land was proclaimed to be worth, half-a-crown's worth, five shillings' worth, or ten shillings' worth, per acre, of conveniences, &c. Meanwhile, once his fence, or something to equal value, has been put on the place, he gets a lease, and he has been paying a quit rent of a threepenny-bit per acre per annum. If he likes, after five years, to pay up the balance to make up the total exacted by the State—the total being half-a-crown per acre, the balance at that stage one and threepence—the land is his, in fee simple, and the obligation of personal residence is at an end. He can, if it happens to suit him, travel in Europe or go as a missionary to China, and let his farm. But



"From its Nook of Leaves."

SELECTOR'S HOME—ORANGE TREES, DATE PALMS.



if he prefers just to keep on residing, he can retain his one and three-pence per acre in his pocket, and continue paying his threepenny-bit per acre yearly for five years longer, and then find himself freeholder of his land and free to tour the Continent.

The foregoing is descriptive of the most economical way in which a man in Queensland can acquire a property of his own. If the area in which he selects be first-rate, he is limited to 160 acres; if it be of secondary value—say mixed proportions of arable and of grazing—he can take 320 acres; or, again, if the proportion of arable to grazing land is small, 640 acres—one mile square—can be selected by him. In fixing, by proclamation, the land value which governs the quantity permissible to Homestead selection, accessibility will be taken into consideration. Remote from a local market—such as a country town—from the navigable part of a river, or from a railway, land for Agricultural Farms and Homesteads will be valued at a lower figure than when, quality being equal, none of those advantages obtain. Thus the stiffer the pull to be exerted by the selector, the lighter is the load which the State imposes upon him. The idea is, plainly, to lay no load at all upon him. What he pays, ostensibly as rent, is really just a trifle to meet the expenses of registration and administration, so as to ensure that no improper advantages shall be taken of the community, which invites *bonâ fide* settlers to enter freely upon industrial occupation of pieces of land, amply sufficient to employ all their energies and yield adequate reward for the industry exerted.

Thus, then, the labouring man, the farm hand, the bushman, timber-getter, stockman, or other wage-earner who has put by savings, the digger who has struck a patch, the miner who has hit on a good “shute” of gold in a reef and “made a rise,” are enabled to secure a bit of land and settle down with the lass of their choice. The savings need not be large, the “rise” need not have been high, to enable them to make a beginning on this scale. If the money be more plentiful the State offers inducements, not so cheap, on a larger scale. But very



The Selector's First Ploughed Field.

small means suffice to make a man who knows bush methods master of the situation on the Homestead farm at 3d. per acre per annum. With a newly calved cow he will have milk and butter, with over-plus of skim for a sow. Firing in Queensland is small concern; but, anyhow, except on the downs, he will have an embarrassment of riches in that commodity. A pen of poultry will pick up their own living and

multiply. He will have little to buy save groceries and clothing. Vegetables, after a few months, will cost him nothing. Granted health and strength, success is brightly beaming ahead. What success signifies, alike to the individual and to the community, deserves consideration. What can be achieved is already amply illustrated by what has been accomplished under conditions in no respect more favourable.



On a Selection—A Forest Clearing.

The substantial yeomen who reside in comfort and independence on their freeholds in the districts where settlement was earliest undertaken have, for the most part, had beginnings quite as modest as any which selectors of to-day or to-morrow have to contend with. They have come through periods of stress and struggle, probably more severe than those which have to be encountered by the beginners of the present. Now, indeed, good roads, bridges, and culverts render their properties accessible. Railways have penetrated the districts in which they live. The stumps have decayed in their fields and gardens. They have laid by the axe and the mattock. Their barns are built long since, and the heavy pressure which bore on them while yet each day presented to them the prospect of laborious years, before their fences, their yards, their pens, their bails could be split and erected; when this grove of timber was yet to be felled, that field to be enclosed, and that to be broken up; a length of paled enclosure to be provided here, and orchard trees to be planted there, could be accomplished, is off their minds. They can rest and be thankful. When they selected, their choice of lands was wider, no doubt, but markets were no nearer than they are to the available lands of to-day. And while the demand for produce was not proportionately greater than it is now, it was restricted to a much smaller variety of products. Besides, they were pioneers and experimentalists. When, now, an unseasonable frost nips their wheat in the milky ear, or the dreaded rust reddens the juicy stems, they know exactly how to minimise the misfortune, and are prepared with appliances to effect the rescue. But how dearly did they buy that experience, and a score of such experiences.

Many an old Darling Downs selector can remember how, even after he had learned that a field of wheat nipped in the ear, or attacked by rust, was yet a crop of excellent hay, if swiftly harvested, the slow method of scythe and sickle, and the impossibility of



procuring reapers, had compelled him to see the hour of salvation pass unavailed of. Now, when such a trouble afflicts him, the machines are wheeled out, each from its shed, and within a few days the tall stems are on the ground or tossing by the horse-drawn haymaker, and so without delay to barn or stack.



Stacking Hay by Machinery—Darling Downs.

The range of vegetable growths for which the territory of Queensland has been proved suitable is so very extensive as to strike newcomers with surprise, and even with scepticism, when the list is brought under their notice. But when it is considered that the colony extends from South latitude 29 degrees to 11 degrees, a distance of over 1,000 miles from South to North, part of the reason is seen. Again, although compared with other continents, Australia presents but trifling alternative of vale and mountain, still there are inequalities of elevation adequate to explain what at first seems astonishing. Thus the Darling Downs constitute a plateau with an eastern rim about 2000 feet above sea level, and dipping very gently to West and South. Generally throughout the territory indeed the country slopes upward from the coast towards the Dividing Range at a sharper angle than it falls from the crest of that range inland. Thus it happens that any vegetable or fruit which grows in Great Britain has some habitat in Queensland, where it flourishes to great advantage. And, on the other hand, the native products of the most torrid regions of the Globe find conditions suitable somewhere among the lower levels of the Northern coastal districts. Within 17 degrees of the equator the Herberton plateau—complete railway communication between which and the absolutely tropical settlements of which Cairns is the port and capital city will shortly be accomplished—has elevation sufficient to so modify the temperature and condense the moisture from the trade winds blowing from the ocean, as to render the growth of cereals and fruit trees appropriate to much higher latitudes not merely possible but vigorous.

The prevailing sentiment to-day among Queensland Agriculturalists, is that Sugar is King. This, however, is not strictly accurate. Maize—Indian Corn—the homely ruler under whose sway past generations of Australian settlers have lived, has not yet been deposed. As a poor man's crop there is none with more numerous merits.

As is elsewhere pointed out, it can be sowed among the stumps and in the ashes of a newly felled and burned scrub, and yield superlatively. It is hardy, subject to comparatively few diseases, and with the simplest appliances a settler with a young family can accomplish every part of the labour, from the planting of the seed to the putting up of the grain in sacks for market. At a pinch—and how many settlers have experienced a pinch during the earlier years of their enterprise—it is easily convertible into a wholesome meal. No one acquainted with all the merits of maize could ever despise it. The celebrated William Cobbett, yeoman, soldier, author, and politician, became acquainted with this plant while serving with his regiment in Canada, and strenuously advocated its cultivation as a cottar's standby on his return to England. Indeed he did more. He successfully cultivated two acres of a dwarf variety in his own garden at Kensington, besides having "a large field" of it on his farm. This was the corn, he asserts, which the

Disciples plucked ears of, as they were going up to Jerusalem on the Sabbath day, for which act they were blamed by the Pharisees. Cobbett's American experiences were gained early in the nineteenth century, when settlement was in its early stages, as it is in Queensland to-day, so that his observations have a considerable, although not entire, applicability. In America, he says, all the hogs



Maize Growing amongst Stumps.



and pigs, all the poultry of every sort, the greater part of the oxen, and a considerable part of the sheep, are fattened upon this corn; it is the best food for horses; and, when ground and dressed in various ways, it is used in bread, in puddings, and in several other ways in families; and that, in short, it is the real staff of life in all countries where it is the common culture, and where the climate is hot. For bacon pigs, he goes on to say, it surpasses all other grain whatsoever.

Omitting the fattening of sheep and oxen, all this applies very aptly to Australian experience, although, among immigrants from Great Britain and their descendants, habit and a just preference for wheaten flour have almost amounted to a prejudice against the substitution of maize-meal as a staple bread-stuff. This has been in some degree accentuated by the common use of maize-meal, as an economic and at the same time wholesome diet, in the preparation known as hominy, in gaols. So far has this prejudice been carried that there have been abundant instances of Queensland housewives, when their husbands' barns have been full of maize, and a steel handmill was available, buying a British preparation of maize, known as "corn-flour," to make puddings with.

For many years, in Queensland, and in New South Wales also, maize was almost the sole crop grown on any scale by farmers. Glutted markets were the frequent consequence of good seasons, so that progress in farming was up-hill. Pumpkins were an accessory crop. It often enough happened to farmers who had but limited areas, and were agriculturalists exclusively, with little in the way of neat cattle save a few milch cows and their progeny, that they were without butcher's-meat for months at a stretch. On festal occasions, when they were supposed to indulge themselves, or when desirous of extending the handsomest hospitality to a visitor, they were supposed, according to a popular bush witticism, to "tell Bill to go out and kill a pumpkin." In squatting districts, however, the selector who had appropriated a slice out of the pastoralist's leasehold "run," it was complained by the squatting class, was not apt to be without a piece of beef in the hut, even though he had no cattle on his selection. But this applied more particularly to N. S. Wales, where the rash legislation of the late Sir John Robertson invited men to appropriate pieces of land wherever best suited their purpose all over that colony. A member of the Sydney Legislature, a one-time Queensland journalist, more gifted at framing epigrams than at subordinating art to discretion, once declared, publicly, that the entire plant of some N. S. Wales selectors consisted of "a bullet-mould and a harness-cask." A harness-cask is a tub for salt beef. The saying was so widely resented that the utterer found himself at the next election excluded from public life.

Returning to the subject of maize, it may be said that there are few parts of the Colony, from north to south, and from east to west, where

it has not been, and is not being grown, and no part where it could not be grown. Over 100,000 acres of land are devoted to this grain—more, that is to say, in the aggregate than 100 estates, each of 1,000 acres. The average yield, during the past ten years, has been at the rate of 21 bushels to the acre.

Few farmers probably would admit that on their land and by their cultivation so low a quantity had been garnered. It is not uncommon to hear of yields of 30 bushels per acre; 40 bushels would cause no surprise; even 50, 60, and actually up to 70 bushels, have been boasted of occasionally. But the extreme yields may be attributed to exceptional conditions. The first yield from virgin soil, with a particularly favourable season as regards timely rains, neither too much nor too little, would produce extraordinary crops. Perhaps there

are still in the United Kingdom and Ireland a majority of people—even of people of rustic habits—who know nothing about maize. We can very well remember, half a century ago, when an ear of maize was among the curious nick-nacs of a drawing-room. It may, therefore, be useful to explain, for the benefit of people in the old country, how it is that maize is so handy a poor-man crop. Its prime virtue in that respect is that it positively exacts from the cultivator the ownership of no machinery at all, from sowing the seed to eating the cake. With a pointed stick and two stones, the whole business, from tilling to milling, could be managed. Choosing wet weather, when the soil is soft, holes could be poked in the ground to drop the seed grain into, and when the crop was garnered and the grains separated from the cob, they could be beaten to meal between the stones. Perhaps man, in the stone age, managed so. There are still primitive races whose tillage of the Indian corn is only a little better than the pointed stick method, and there are plenty who pound the maize to meal with mortar and pestle.



MAIZE.

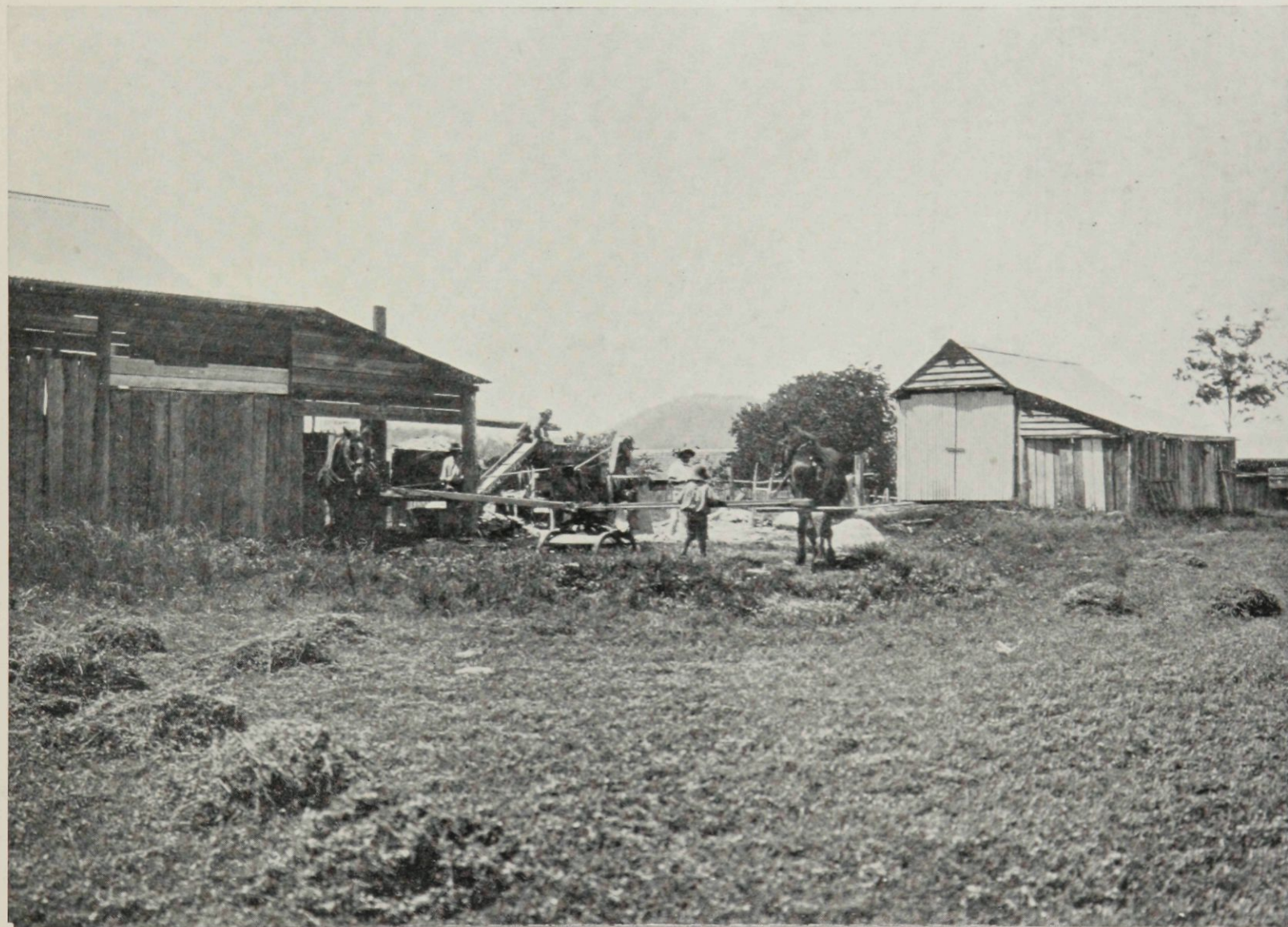
The white backwoodsmen of North America and the pioneer farmers of Australia were not so very far ahead of the most primitive peoples, so far as their first cultivation was concerned. Some of the best crops ever garnered have been chipped in with a hoe, and the day of the hoe, that simplest of implements, is by no means gone by. So long as there are scrubs to be cleared away for cultivation to take their place, the hoe will precede the plough. It has generally been the hoe which has planted, and hilled up, and kept the weeds from smothering those record crops of 50, 60, and 70 bushels to the acre which one hears about. Suppose, however, the crop ripe, the poorest man can harvest it. Every other grain crop must be reaped, and to reap one must have tools. Maize resembles fruit in this regard. The farmer plucks it: the ordinary expression is that one "pulls" a field of maize. The only tool required is the human hand. The pulled ears can be pitched into a cart, following down the field, or into baskets,



creels—anything—and emptied into barn or anywhere sheltered from the rain. Now the husk—the tough, stiff, papery envelope which enwraps the cob—has to be removed. Again, the human hand is a tool sufficient for the job. Fingers will do the work. But it's mighty rough on the fingers. Still, by the time a settler has broken up a plot for maize, has sown his crop, has run up a fence of any kind to keep the cows from it, has hilled the shoots, and hoed down the weeds, his hands won't be too delicate for husking, although a long spell at it will wear even rough-skinned fingers to the quick. Nobody loves husking maize. Yet among the pioneer settlers of North America, a Husking Frolic, or Husking Bee, was quite an institution. On the principle of "many hands making light work," a whole neighbourhood would, on

indeed is he who hath his quiver full. When husked, the ear is laid bare with its rows of grain still adhering to the cob, and requiring to be detached. This process is "shelling," and for it again the horny hand of the settler is an effective machine. Many a hundred—many a thousand—bushels of maize have been shelled by hand, when no better appliance could be put to the work.

But American ingenuity has concerned itself with each of these troublesome processes. A handy little machine for doing the shelling has been commonly available for nearly half a century past, and a man has had to be very severely stinted in cash and credit, who could not procure from the nearest storekeeper, for a couple of pounds or so, one of these appliances. The removal of the husk has defied ingenuity



**Husking and Shelling Maize by Machinery.**

PITMAN'S FARM, LAIDLEY CREEK, WEST MORETON.

being invited, congregate at one farmer's place, and put in a day—men, women, and children—at husking. The settler, thus helped quickly through a long and disagreeable job, provided a feast, rude but plentiful, and a dance in the barn or the cabin concluded the function, some time before the break of day.

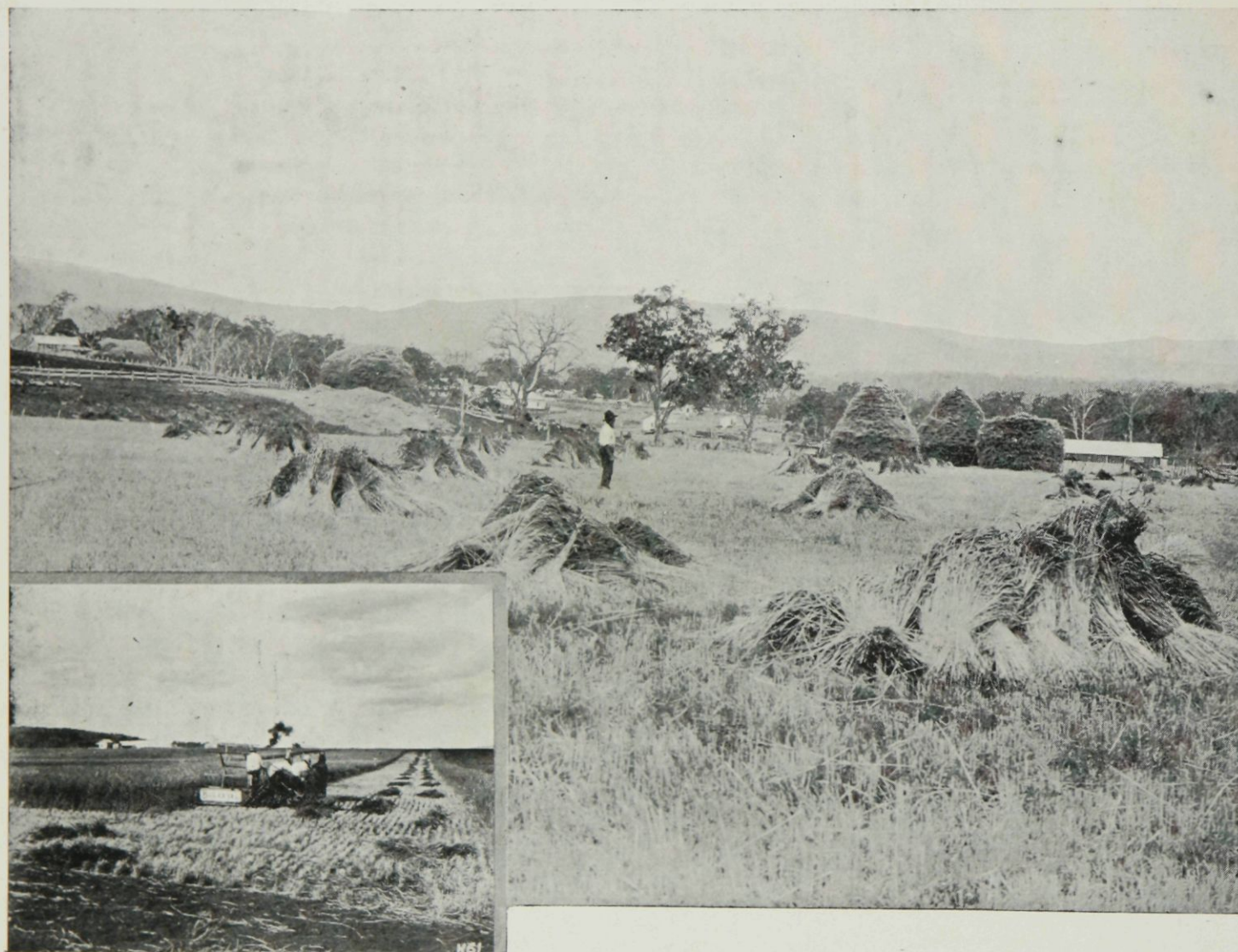
For reasons chiefly connected with the precedence of pastoral pursuits in the settlement of Australia, but which need not be elaborated here, this custom of occasional co-operation, known as "Bees" in North America, has never come into practice in Australia. So the selector has just had to worry through the job of husking his maize as best he could, and, at such a stage of his harvesting, blessed

for a much longer period, but the problem has been solved. For maize harvesting on an extensive scale there are now machines of American invention, operated by horse or by steam power, which husk, shell, winnow, and bag maize at one continuous operation. It is still usual, when cultivating maize for grain, to leave the stalks to wither on the field, either to be burnt where they stand or to be ploughed in. The cob also, a slender cone of dry vegetable fibrous material, is commonly treated as waste material, and got rid of anyhow. The selector can not afford to economise, because he is poor; a paradox easily explained.

When a farm is worked on a large scale, it has been found that there remains in the wilted stalks nourishment enough to make it



profitable to haul them in, and slice or shred them by machine-power for admixture with richer fodder. So, also, when maize is intended to be fed to working stock or dairy cows, it has been proved that the despised cobs are too good to waste; and a steel mill has been contrived which takes the ears and grinds into a coarse meal grain and cob together, thus increasing the bulk of a beast's ration, and providing dry food in quantity sufficient to give wholesome operation to the stomach or stomachs. Animals so rationed are said to thrive better than when nourished on the concentrated ration of grain alone. But such a mill costs more than beginners generally can afford, and is not in universal use.



Wheat Harvesting, Yangan, near Killarney.

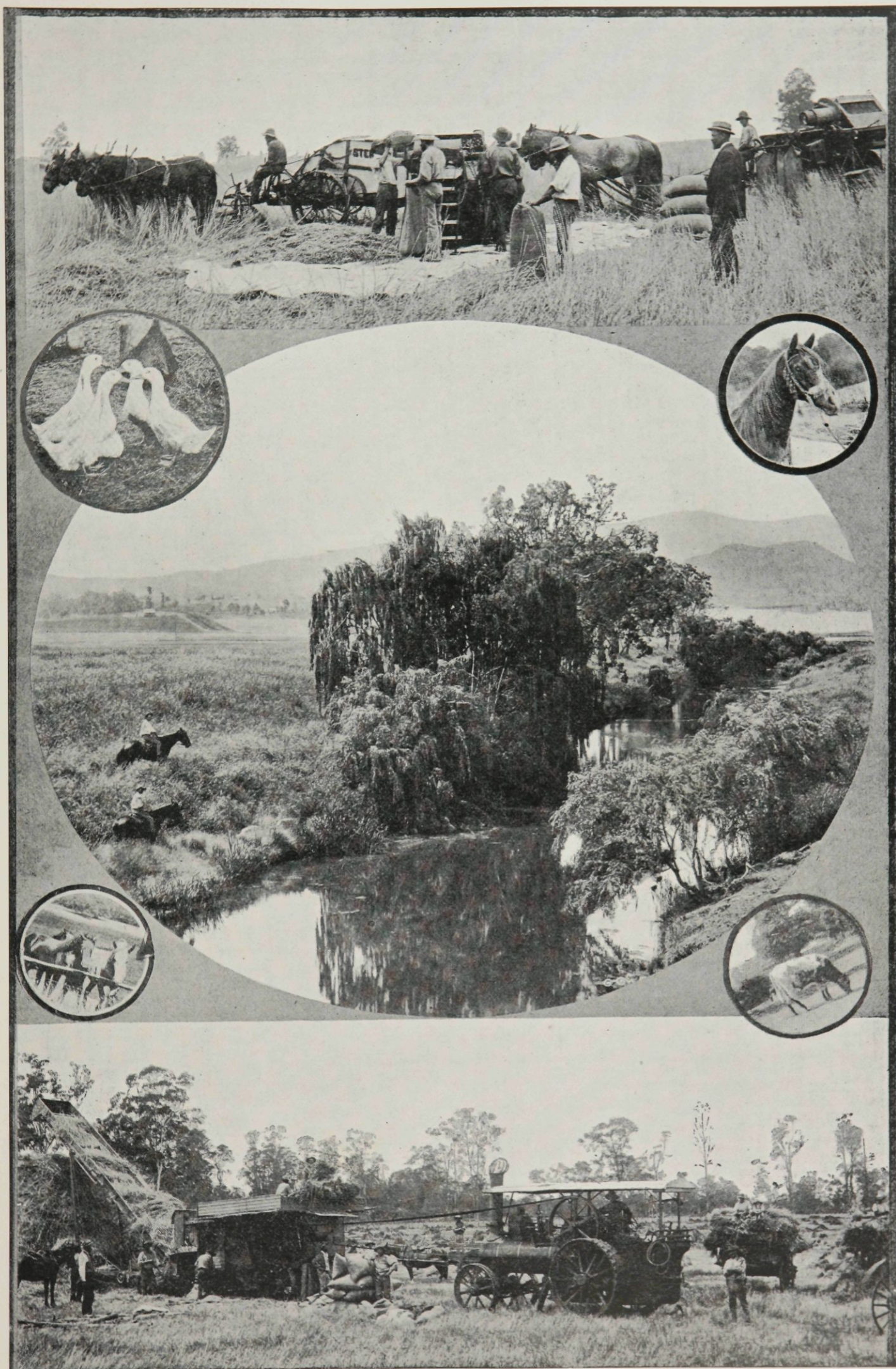
Whenever there have been migrations of races there have been also migrations of their familiar industries and plant-cultivations. This general truth is particularly applicable to migration by colonisation. The British immigrants to Australia naturally carried with them the arts and plants for cultivation with which they had been best acquainted in their native land. Wheat was the first cereal grown by the bondsmen of Port Jackson, and although maize wrested from it, very early, the premier position, it seems probable that the usurpation will not be enduring. Maize, although a wholesome grain, is as inferior for breadmaking purposes to wheat as Dr. Johnson considered oats, which he described as a food for horses and Scotchmen. Anyhow, so long as wheaten flour holds the palm for delectable bread, the cultivation of the grain will be a stand-by for farmers, wherever conditions are favourable. The illustrations which we present

must sufficiently testify to the suitability of most conditions for wheat culture in Queensland. Indeed, if for the sake of understanding, it be imagined that England were again a wild land as when the first Roman colonists established themselves there and introduced the arts of civilisation, it is pretty clear that as regards natural fitness that country was very far inferior to the territory of Queensland. The Roman colonist, had he been, as is the Australian settler, under the necessity of clearing away brush and forest, of breaking up the soil, of enclosing it, and erecting a shelter for himself and his belongings, all with his own hands, and of then winning crops to support him, despite novel conditions of climate, and plant-diseases quite outside

his Italian experience, would, we apprehend, have had a far harder task than had to be overcome by the settler in Queensland. So also it is apparent to anyone who has made himself acquainted with the difficulties which had to be surmounted by the immigrants to Canada during the first quarter of the nineteenth century that in few "new" countries are conditions as favourable as in Queensland for the introduction of this Queen of Cereals. It is not possible to state any limits to the parts of Queensland where wheat might be cultivated. The natural rainfall, which is so dominating a factor, diminishes as distance from the ocean and from the Main Dividing Range is increased. But precisely where the line of separation between

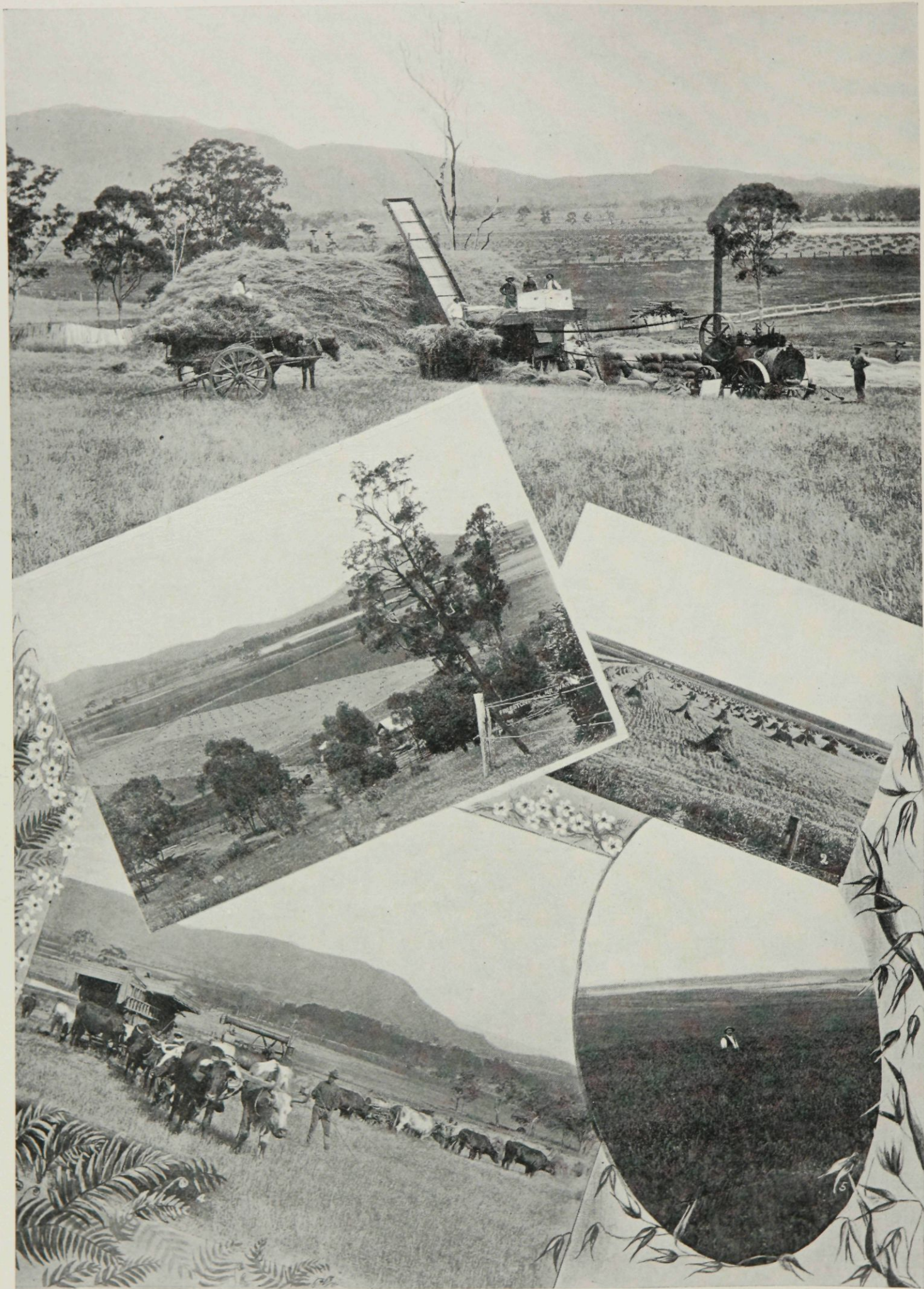
tracts which have a rainfall sufficient in quantity and of adequate frequency of downfall for profitable wheat-growing, should be drawn, there is not enough experience or information to decide theoretically. Up to the present time the famous Darling Downs have attracted the bulk of the farming of wheat. The gently sloping plains and downs, devoid of trees, or very lightly timbered on their margins, where the ploughman can turn over the rich black or chocolate soil in a furrow for a mile without meeting an obstruction, have successfully invited tillage, and the views here presented are eloquent of the results. The facilities for employing labour-saving machinery for every process, for drilling in seed, for stripping the ripe ears, or, if preferred, for reaping and carrying ear and straw together, for raking hay and stacking, are so complete that the use of mechanical appliances is almost universal.





THE DARLING DOWNS—Yangan and Swan Creek.





Wheat-growing on the Darling Downs.

1. EMU VALE.

2. WHEAT IN STOOKS.

3. AT FREESTONE CREEK.

4. AT YANGAN.

5. HEIGHT OF WHEAT, HERMITAGE, NEAR WARWICK.



The construction of railways, penetrating the rolling downs and plain country hence far to the westward, has led to experimental extension of wheat cultivation to central settlements such as Roma, 330 miles, and as Charleville, little less than 500 miles from the ocean. On the Eastern—that is to say, the coastward—side of the Dividing Ranges, chiefly forest and scrub lands, requiring considerable preparatory labour, delay, and expense in clearing, field agriculture has been less rapidly expansive. But in those tracts also wheat is successfully, and, considering the sparse population of the whole colony, extensively grown, and has given higher average yields than the more tempting-looking fields on the downs plateau. Forest country—including patches of open—has here been chiefly put under this crop, the scrub clearings being applied in smaller areas to more intense culture of other products, by small farmers, not yet, in many instances, emerged from the hand-to-mouth stage of winning a livelihood. The two Moreton Districts—East and West—are the most developed. This is a natural consequence of their propinquity to the earliest centres of urban settlements in Queensland; as to East Moreton to a degree of accessibility by water, for short distances from Moreton Bay up the minor rivers which carry off the drainage of the Dividing Range; and as to the portions not so accessible, to a more generous provision of railways than other parts of the colony, equally favoured as regards soil, are yet supplied with. Still, it is suggestive that wheat-growing, in an experimental degree, has been undertaken Northwards—at Gympie, where the soil cannot be regarded as provocative of agricultural enterprise; at Nanango, a richly endowed locality on an extreme head of the Burnett; at Gayndah, lower down the same stream; and at Gin-Gin, on the lower portion of its watershed—the last-named a tract of undulating forest ridges of excellent red soil, where sugar cane is grown in increasing quantity.

Even the Rockhampton district has its trial field of wheat, while in the same latitude—on the tropic line of Capricorn—at Emerald and Barcaldine, spirited beginnings have been made. At Barcaldine is the furthest inland spot where wheat culture has yet been essayed. The attempts in the far west, however, may be regarded as in suspense at the present time. There have been droughts so persistent that even the native grasses, cropt by stock, have been unable to make fresh growth, and nothing reliable can be deduced, under such conditions, regarding the average possibilities of agriculture in those parts, taking seasons as they come in alternations of good and bad. Moreover, the experiments there are involved to a degree in the general problem of irrigation, a complicated question which we deal with separately in another part of this book.

In appearance there is positively no difference between the Western treeless country in Queensland and the Prairie lands of North

America. The soil also of the rolling prairies along the old Indian trail by Santa Fe and Tucson appears undistinguishable from the fat black soil of our western lands. Ploughs constructed in the United States for the “blacksoil lands” of these prairies are found to be the very thing for our Darling Downs, and extensively used here. Within the last 20 years every acre of these prairies has been brought under cultivation, and where not long before the Apache Indians made settlement impossible, and caused mines on the ranges of Arizona and New Mexico to be abandoned, the Southern Pacific railway has pioneered civilisation and been instrumental in establishing there countless homes and fields of waving wheat. A temperature higher in Queensland, on the whole, does not affect the suitability of our own prairies for wheat growing. Rainfall only or other moisture is the point of difference.



WHEAT—From Stook to Stack—Darling Downs.

In 1899 there were under wheat in the Coastal Districts 763 acres, giving an average yield of 15·10 bushels of grain per acre. West of the main ranges—chiefly on the Darling Downs—the acreage was 51,539, and the yield at the rate of 11·60 bushels per acre. In addition there were fields farther north and far in the interior. A plot of three acres in the neighbourhood of Rockhampton yielded at the rate of 30 bushels per acre, pretty strong proof that, given intense cultivation, it is not a high temperature which will interfere with successful wheat growing. Even in this familiar—to Europeans and Americans—branch of farming, however, development, under the everywhere novel, and the very varied, conditions incident to its migration from the Northern to the Southern Hemisphere, and to the vast range of soil, climate, temperature and situation even within Queensland alone, has been attended by many difficulties. First the irregularity of the seasons as regards rain sometimes hampers tillage, or allows the seed to moulder in the ground, instead of germinating. Again, the disease known as rust afflicted the earlier pioneers in wheat-growing to a most lamentable



extent. Just when the farmer's heart was expanding with sympathetic joy as he saw the ear begin to swell on a most bounteous growth of leaf and stem, this canker would appear, and in a few days, his harvest and his hopes would be blighted. Such ill-fortune was the more aggravating because it was noticed that rust was never so apt to attack the wheat as when the weather was the most favourable possible for the growth of the cereal. Warm, still, moist days, when one could almost see the wheat growing, were just those which seemed to develop the sporadic parasite. Its worst terrors have however been abated by application of various lessons from experience and especially by a choice of varieties, proved by tests to be best adapted to resist the

where some 6,000 to 7,000 acres are devoted to growing oats for hay, with an average yield of a little over 2 tons per acre. But so reliable and hardy is the plant, and so well does it repay even the careless tillage of a station paddock, that there is practically no part of Queensland where it is not grown. On the Darling Downs, farmers prefer to use their land for the more profitable wheat, but about 1,000 acres are allotted to the oaten hay crop. On the poorer lands of the Stanthorpe District, in a cooler climate, a comparative preference is given to it. But climate is not of prime importance, as it is quite largely grown in the Rockhampton District, and is not neglected as far north even as Cairns, and as far west as Hughenden. About half the area tilled for oats,



Prairie-like Wheat Lands—Hermitage State Farm, near Warwick.

disease. In respect to this the State has earnestly sought to discharge its duty towards farmers. The Department of Agriculture has sent forth, year after year, its communications to every part of the world, soliciting counsel, and seeking rust-proof varieties of the plant. Experimental farms have cultivated annually long plots, side by side, of this, that, and the other species, and the comparative results have been communicated freely to farmers all over the colony.

Oats grow as well as heart could wish in any part of Queensland, but are much more commonly cultivated for feeding green to dairy and stud stock and for hay than for grain. The all-round superiority of maize in the latter respect, thrusts oats into a secondary position. For hay the latter has no superior. The most extensive cultivation of oats is in the Southern districts on the coastal side of the Main Range,

to be saved as hay, is additionally used for growing it for cutting green, the localities being, naturally, almost identical. As a green fodder rival crops are Barley, Lucerne, Rye, Sorghum, and in to less extent a score of plants, introduced experimentally from all parts of the world.

Barley has from the first settlement of Queensland been a favorite crop for winter-feeding of dairy stock. It is a plant which does not arrest its growth when the impulse of spring and the warm encouragement of the summer season have passed. It grows strongly and rapidly during the winter months when the native grasses are wilted and at their worst as regards nourishing quality. It is hardy; frosts do not harm it, and although somewhat too coarse in the straw to make a first-class hay, its juicy stems and blades are first rate for milch





Hay Carting—Danderoo.

cows and stock generally. For over a quarter of a century these were all the qualities which gave it value to the Queensland farmer. Of late years however conditions have altered. Maltsters have established themselves on the Darling Downs, and have need of all the barley grain which has so far been forthcoming from local farms. An import duty of 4s. 6d. per bushel on malt gives, in the absence of any excise on the commodity, an advantage to local maltsters which ensures success, and thus extends benefits to the farmers. 100,000 bushels of malting barley were harvested during 1899.

A digression suggests itself here, having reference to breweries in Queensland. There are in the Colony twenty-four such establishments. The earliest to be established on an extensive scale was at Toowoomba, where considerations of temperature and quality of water available induced Messrs. Perkins, two brothers from a southern colony, to erect large works. Since then, over quarter of a century has been productive of remarkable advances in the art of refrigeration, and climate has become of less importance to the fully equipped brewery, where each establishment can tolerably manufacture its own climate, in-doors, so far as temperature is concerned. Hence it has ensued that whereas for a long time the metropolis and Northern towns drew a major proportion of their supplies of colonial ale from the brewery on the Darling Downs, now breweries have multiplied in the metropolis itself, and there is no considerable town without its local brewery. The ale produced is, speaking collectively, a light beverage, adapted for consumption in a warm climate. The proportion of malt to water is low, and the beverage bears a considerable resemblance to English table-beer. It is an agreeable drink, very largely consumed over the counters of public-houses, from the wood, and highly esteemed, when bottled, for domestic consumption. About 181,000 bushels of malt sufficed to brew nearly five and a-half million gallons of this beverage.

To return from beer to malt, from malt to barley, and pass thence to other cereals, Rye is one which is cultivated to some small extent. Like barley, it flourishes in the cold seasons, and is then useful for green fodder; but being really but a mean sort of wheat, it is not high in general estimation. For its place among the agricultural products of Queensland, rye depends almost entirely upon the immigrants from parts of Germany, where this cereal is best adapted to the harsh climate and sandy soil, which wheat is intolerant of. It is the thrifty German farmers of Middle Ridge, Toowoomba; of Rosewood Scrub, Pine Mountain, Dugandan, and other centres of Teutonic settlement in West Moreton, who introduced and still cling to the cultivation of this cereal. Among the older settlers of that nationality the grain was harvested generally

in the first years of their struggles to establish themselves, and the somewhat sodden and discoloured loaf of rye-bread was their universal provender, saving the cash outlay, on bakers' bills, which was at first beyond their means. Acquired taste, amounting to a preference, a habit of severe economy subsisting long after the necessitous immigrant settler had grown into the well-to-do farmer, and freeholder, with property leased out, and a plump credit account at the bank, account for persistence in the occasional domestic use of rye-bread in the homes of German Queenslanders.



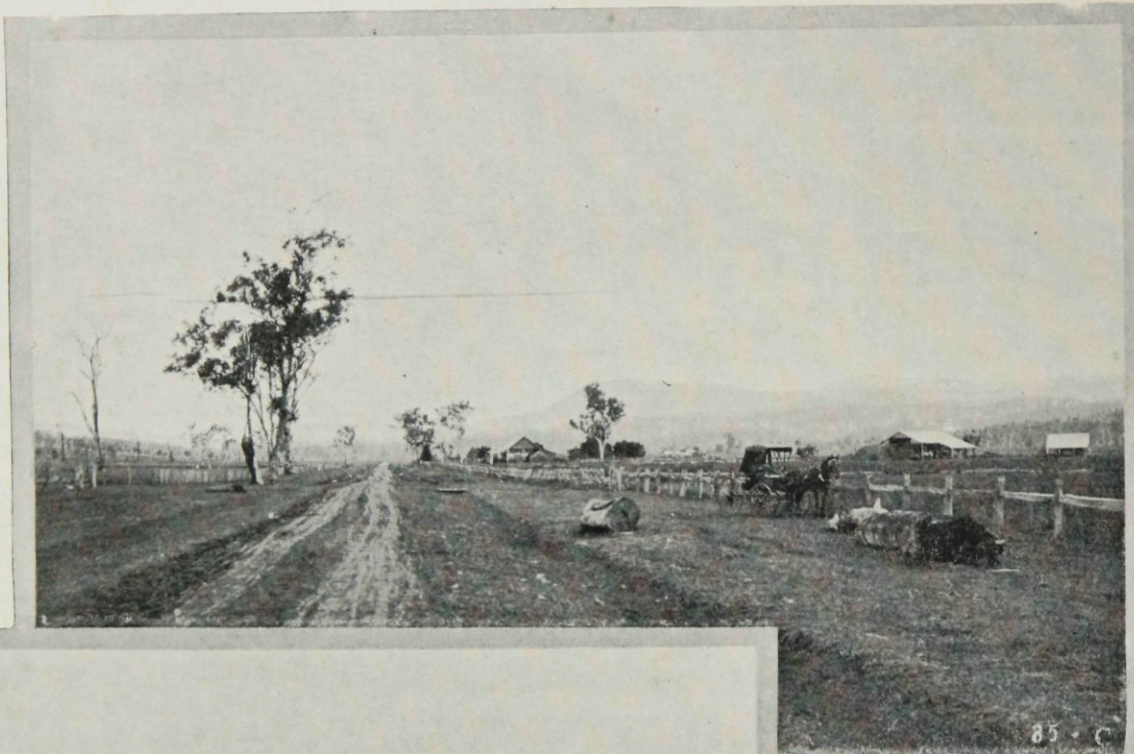
A Field of Pumpkins.

Another plant of prime interest to Queenslanders is Lucerne—known in America as Alfalfa—which more than fills in warm countries the place which clover takes in Great Britain. Lucerne is of the highest value among fodder plants. Once sown and established in a field, it throws its roots deep into the soil, and makes itself, in suitable situations, one of the finest drought-resisters conceivable. When planted



on a deep alluvium of soil of open texture, such as borders many creeks in Queensland, lucerne will drive its roots, in the course of time, ten, sixteen, even twenty feet, in fine filaments, down to some moist stratum of gravel, where water lodges, and when the superficially rooted vegetation all round is wilted by a prolonged drought, a field of lucerne will still preserve its verdure, and continue its growth. Of course it is not at its best under conditions so trying, although perhaps it is just then that its merits are most highly appreciated. Like any other crop, lucerne thrives best when liberally moistened by rainfall. It responds handsomely to irrigation, and does not suffer from severe cropping. Stock graze it down with appetite, and without injury to the field; in favourable seasons, as many as three successive crops can be shorn from a field of lucerne. Fed as green forage, it is surpassed by no other plant. Dried and stacked as hay, it rivals any other. Once planted and allowed a season of gentle treatment, a field of lucerne will last for years without further attention. But the wise farmer will not neglect to reward its productiveness and prolong its fecundity by top-dressings of manure.

A surprisingly large area is appropriated to the pumpkin, a vegetable fruit of coarse and unattractive external, but of a real value to farmers. To the inhabitants of the British Isles and Northern Europe the merits of the pumpkin and allied gourds are scarcely known. But that Cinderella's fairy Godmother utilised the globular fruit for conversion into a very fine carriage for the heroine, a very large class of town-dwellers would not know that such a thing existed. The American people are better informed, and the ordinary appliances for slicing



At Laidley, West Moreton.

A COUNTRY ROAD.

HILLING POTATOES.

Among the Chinese who have intruded into the colony, and are unsurpassed as cultivators and hawkers of market-garden products, some plantation of rice has been done. But probably only in the same spirit as German settlers cultivate rye. The only importance of this so far has been the convincing evidence it affords that this cereal, which is the mainstay of the teeming populations of Asia, can be cultivated with perfect success in the coastal parts of Queensland, from the rich alluvial of the Logan River on the South, to Cairns, where it is most largely grown, in the North.

pumpkins for rations for dairy cows and other stock are inventions by residents of the Great Republic. It is especially as provender for swine however that pumpkins are valuable—although they serve also as a very excellent table vegetable. With pumpkins for the staple food to rear the animals, and maize to top them up and harden the flesh and fat, pigs can be made exceedingly profitable stock on a farm, especially when worked in conjunction with dairying. But it is not on pumpkins only that the pigraiser and the dairy farmer have to depend. The whole range of root crops and tubers is at his service, more or less. It is true that the above-ground roots, such as turnips and mangolds, require colder conditions, and do not in Queensland generally encourage attention.

But the so-called "English" or "Irish" potato does well. It seems to have been lost sight of, owing to the immense production of potatoes in Ireland, in a bleak, weeping, and raw climate, in England, and in the northern parts of Europe under conditions just as severe, that the native habitat of the potato, where it is found growing wild, a perennial plant, is the western coast of South America—on dry sterile mountains as well as in damp forests near the sea. When this fact is recalled, it will be understood that Queensland is much better adapted for the growth and cultivation of the potato than any part of Europe. As a matter of fact, the plant seems to tolerate great extremes of climate and great varieties of conditions.



Farmers in the Moreton Districts—that is to say, the earlier settled localities having Brisbane and Ipswich for their trade centres—include potatoes among their crops. Instances are adduced of very high good fortune befalling cultivators of this tuber. Two crops a year can be grown, and the yield is sometimes, rainfall coming at the right periods, very great. Up to 10 tons per acre indeed. A market scarcity, consequent on short crops in other parts of Australia, coinciding with a good season in Queensland, has before now been as good as discovery of a rich patch of alluvial gold, to lucky farmers. Under such conditions a couple of years ago, one farmer in the Lockyer district, that is to say on a southern affluent of the Brisbane River,

with the other potato, it is in all respects as excellent. Preference for one over the other is entirely a question of taste, except when prejudice derived from habit comes into operation. The sweet potato is easily cultivated, hardy, two-to-one a heavier cropper than the ordinary potato, and remarkably nourishing for man or beast. Dairy cows thrive on it. Unlike turnips in Europe, it imparts no flavour to milk. Horses munch it with pleasure; swine revel in it, the sugar in the tuber helping to fatten at a great rate.

Immense advantage has been gained by the Queensland farming selectors, consequent on the way in which artificial production of cold



CHEESE FACTORY, LOWOOD.

FARMERS' CARTS DELIVERING MILK.

cleared £700 for his year's produce from a nine acre paddock, and built himself a good handsome cottage-bungalow with part of the money.

But it is mainly for a table vegetable that potatoes are cultivated. The pig gets it only under odd conditions. For feeding beasts of all kinds it has a formidable rival—perhaps a superior—in a tuber scarcely known in parts of Europe where the potato is common. This is the Sweet Potato, a tuberous plant which altogether surpasses the "Irish" sorts—belonging, indeed, to an entirely different species—in several respects. As a table vegetable, cooked in any way which is customary

has been applied to their needs, and by the invention and general use of cream separators. Before cooled chambers were available, and cream separators were obtainable for a trifle by anyone, anywhere, the selector had to be a grazier and stock breeder, mainly, unless his holding happened to be very handy to a township. In the latter case he could market some perishable commodities. But take the general run of selectors. So long as they had to play a lone hand in the dairy and the bacon business—that is to say to manufacture their own butter and bacon, it was uphill work with them. In the hottest days of summer, when grass is abundant and cows yielding best,



butter-making is no light task. Unless the selector had contrived a heat-resisting dairy, which needed labour and ideas, there were mornings when butter would not "come," churn he ever so wisely. Cream, too long accumulated, was liable to go bad. The standard of quality for butter was forced down pretty low that way; and, even when it was made, it wouldn't keep sweet or nice. And in the winter grass would be scarce, the frost cut up the cows, and, although butter could then be made easily and well, the supply of cream would be at the minimum. It wasn't worth while for any but extra smart or very favourably situated settlers to milk a lot of cows, when they couldn't get their butter to market in good condition, say once a week, fifteen or twenty miles and back. And if few cows were being milked, few pigs could be reared. In that way, one difficulty reacted upon the other. Again, supposing a farmer, in a handy situation for marketing his butter, and so having a good herd of cows milking and plenty skim milk, reared and fatted a lot of pigs for winter, when only it would be possible to cure their flesh for bacon, two or three unseasonably mild muggy days might plant the elements of decay in his whole curing while it was in progress. Moreover, under any circumstances, to make really nice bacon, and more particularly hams, is quite an art. It was too much to expect of a settler that he should first of all have unflinching industry, then that he should be a good hand with the felling axe, an expert at splitting slabs, posts, and rails, and putting up fences and sheds, a smart horse-driver, a really dexterous ploughman capable of dodging his share among stumps, and saving himself from a broken neck when a sunken root was struck, a swinging reaper with the scythe, a quick milker, a skilful butcher of swine, and on top of all an expert at bacon-curing.

This was of course more than human nature could sustain. But all such supernatural combination of accomplishments on the part of the selector is not now required, and a great and prosperous change has come over his circumstances. Central Butter factories, widely scattered creameries, are within access of the bulk of the settlers in all but the very newest settlements. In some instances the Butter Factory, with its tentacles of Creameries, is a private venture; in others it is a joint stock company in which storekeepers and other township investors have shares as well as the farmers who supply the milk. Again, some are purely co-operative. Whichever way they are constituted, these establishments are of immeasurable benefit to the selector, and have—in conjunction with another sort of factory presently to be referred to—wrought quite a transformation in his condition and circumstances. The Butter factories invariably have their cold chambers, artificially chilled by machinery. They receive and pay for the farmers' milk or cream, convert it into butter and cheese, store it under preservative conditions of temperature, and dispose of it locally or by exportation in a business-like way which of course no farmer, busy with rural occupations, could approach. Generally the farmer of to-day has his own separator, if he be too distant from a creamery or a factory to receive back his separated milk after the cream has been extracted.

Feeding his residue to pigs furnishes an important part of the profit to the farmer. Pig raising has become a very important branch of rural industry since separators and chilling establishments have been available. And there seems every likelihood that it is only a small beginning of what will become a most important branch of the settler's industrial occupation in Queensland. The farmer has no longer to turn bacon-curer also, in the Southern Districts. Extensive Bacon Factories have been erected, equipped with all the latest facilities for handling with economy and despatch large numbers of swine. The proprietors of these buy the pigs at a price per pound which satisfies the farmers and is remunerative to the buyer. In this industry we have one example out of many showing a striking development during late years. But it is only a baby growth as yet. What has been accomplished of late is but an indication of what remains to be effected.

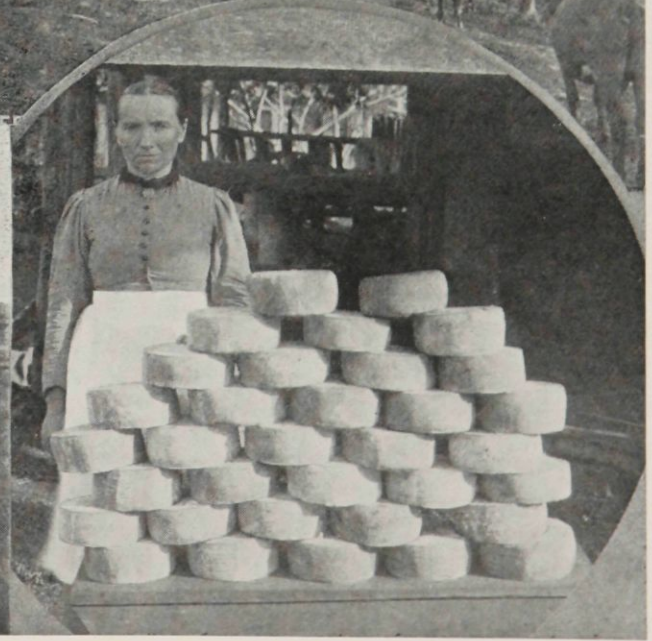
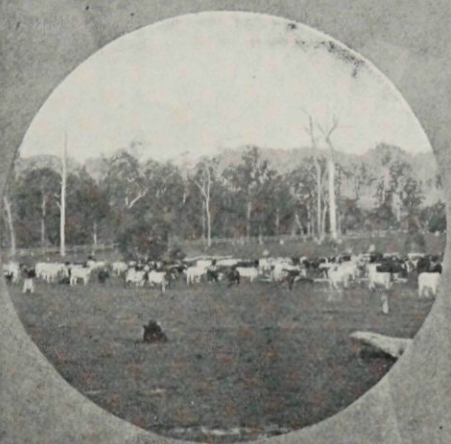
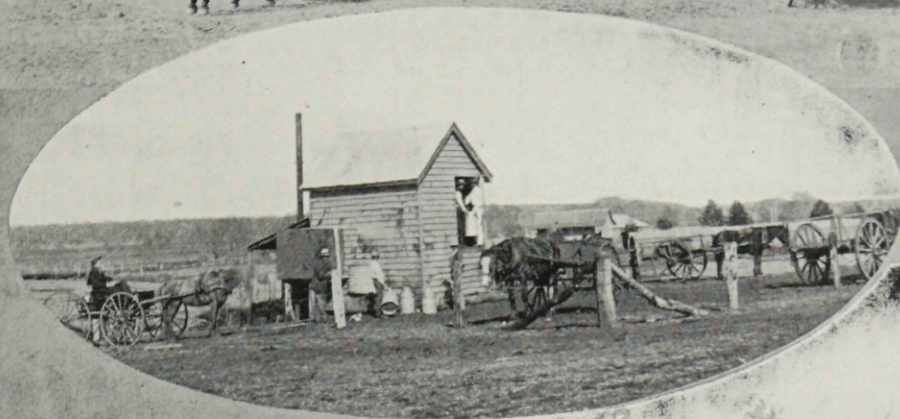
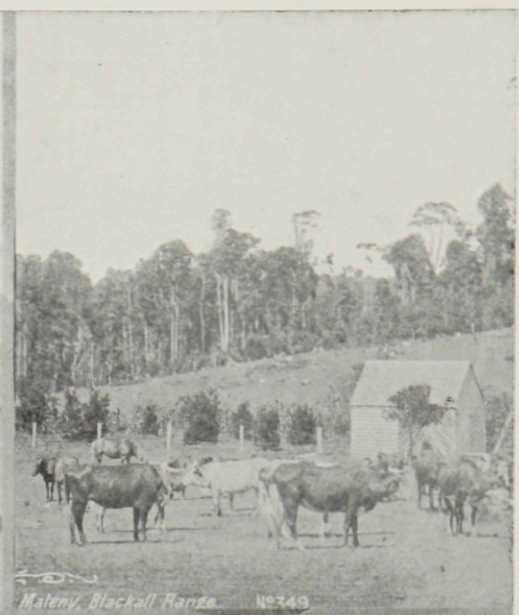


PIG-DAY AT A RAILWAY STATION.

Take the numbers of swine slaughtered for preservation of their flesh during the past ten years: In 1889 the industry was evidently not considered worthy of special attention. Official records account for only 350 pigs slaughtered for preservation of meat during that year; and these apparently were converted into salt pork for shipping. There has been no record of bacon made until the year 1892, when the first large factory got to work. In that year nearly 20,000 pigs were converted into over a million pounds of bacon. The next year the business rose with a bound to the killing of 56,000 pigs. In 1895 the number had increased to 67,000; in 1897 to 76,000; in 1898 to 85,000 swine converted into nearly seven million pounds of bacon.

Among industries connected with the land, which, as yet, must be rated as minor, in Queensland, but which are capable of being extended to any extent whatever, vinegrowing and winemaking, orange and lemon groves, and others of the citrus tribe, coffee plantations, banana fields, the culture of pineapple and cotton bushes, and of arrowroot, must be alluded to.



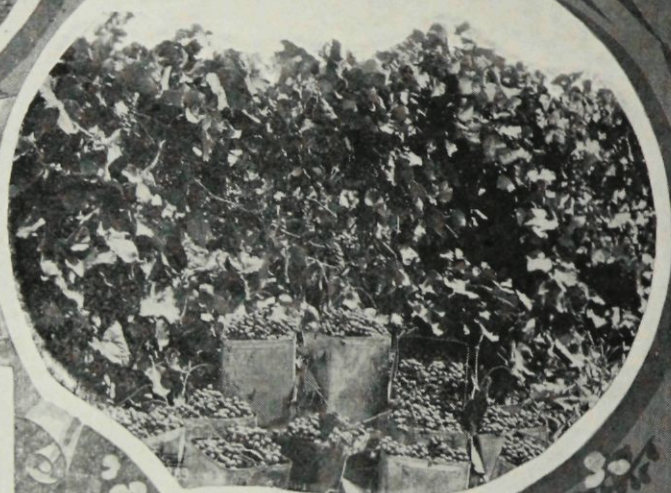
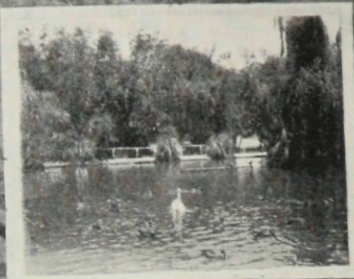


# THE DAIRY INDUSTRIES.

LOWOOD BUTTER FACTORY. A DAIRY FARM. A CREAMERY, SPRING CREEK. HERDS OF CATTLE. HOMESTEAD AND MILKING SHEDS. CROHAMHURST. "WHEN THE KYE COME HAME" (NEAR WALLOON). HER OWN MAKE.



# THE FRUIT INDUSTRY



CHERRY ORCHARD, BALLANDEAN.

A FANCY BIT.  
A YOUNG ORCHARD.

VINEYARD, ROMA.

ROMA GRAPES.

VINEYARD, LAIDLEY.

PINEAPPLES FOR MARKET.



In the Northern districts the cultivation of coffee and bananas succeeds as well as anywhere in the world. Soil, climate, seasons, rainfall—all suit admirably. But such plantations are not within the scope of a settler's first possibilities. Some capital is required, and means of subsistence during the interval between planting the trees and their coming into bearing. Bananas fruit early, but coffee and orange trees need to be four years old before any crop can be gathered. But, once under bearing, profits are very large—provided the planter of coffee can command labour at the gathering season. In this respect he is just under the same difficulties as the

strawberry-grower. Mr. Newport, the Instructor in Coffee Cultivation, employed by the Queensland Government, reckons that on a 10-acre plantation two assistants, besides the owner, would be kept going hard during three months picking the berries. The income, at a rigorously low computation, would be £250 a year gross. Not bad, if the berry-plucking were done by the planter's own children.

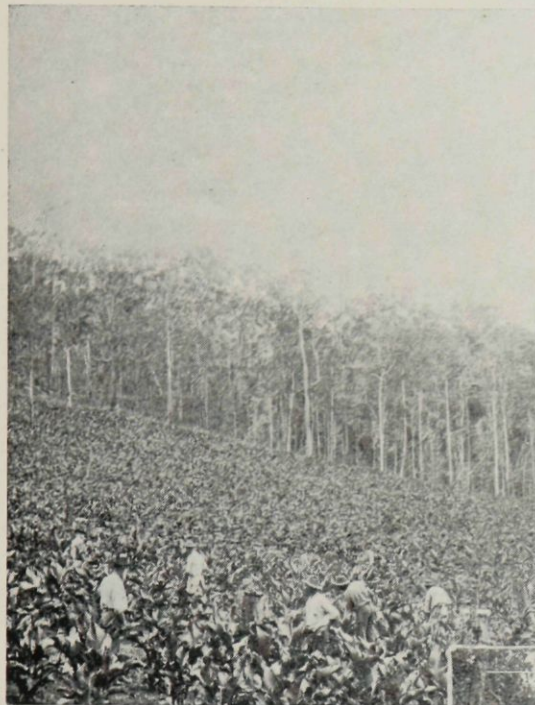
for the first symptoms of any of the diseases which affect the citrus tribe, if uncared for, must be kept up. But, allowing for those conditions, the possessor of an orangery in full bearing, of good sorts, can have his hands in his pockets—and not empty pockets either—more than almost any other man professing to run an industry or a business we can think of. A crop of oranges is easier to pick than a crop of coffee, or of strawberries. A light ladder and an easy mind are about all the appliances necessary. If an owner of an orangery feels too lazy to pluck his fruit, he can generally sell his crop on the tree, and someone will pluck it for him.

The pineapple again is so well adapted for Queensland conditions that it is cultivated with superb results on the coast side of the Main Range, from the Logan district in the extreme south to Cooktown, the further northern settlement. It is to all intents and purposes throughout this colony as completely a field crop as turnips or mangolds are in Europe. And it has this great advantage, that once a field of pineapple plants is established in full bearing—it bears the second season after planting, and is in full bearing the third year—it keeps on bearing for years, and, when situated within reasonable access of a populous town or of a seaport, yields very handsome profits indeed. Within a few miles of Brisbane are numerous small plantations of pineapples, yielding a comfortable living to the cultivators, at the cost of very moderate labour in keeping the spaces between rows well tilled. Frequently other crops are grown between the rows of pineapple plants, which are spaced liberally for the purpose, and thus ample working and loosening of the soil, plentiful manuring,

total absence of clogging weeds, and a constant income are secured. The fruit is exported in great quantities to the southern colonies, as oranges and bananas are.

With respect to arrowroot, that has for very many years been a successful crop, although not cultivated commonly. A few individuals and families have acquired wealth by departing from the ordinary choice of crops, and devoting themselves to growing and manufacturing this. There are few vegetables easier to

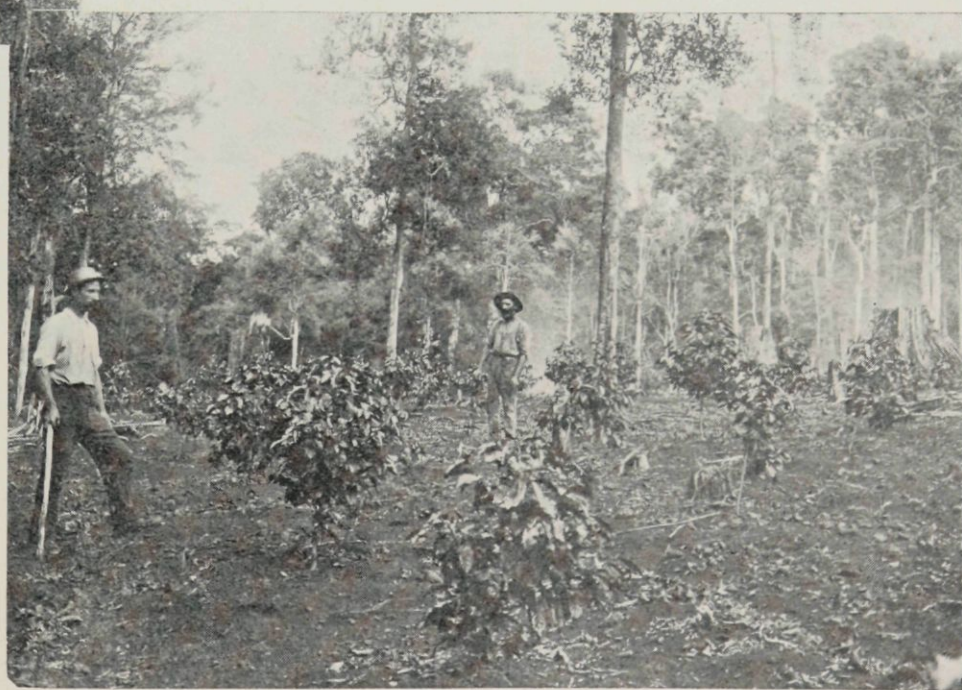
cultivate than arrowroot, and positively none which can with simpler appliances be manufactured into the marketable product. With a common grater and a few buckets of water, anyone with common sense can convert arrowroot tubers into the snow-white flour used for preparing puddings, invalid food, and so forth. But naturally on a large scale special appliances are procured, and stage by stage arrowroot factories have become more and more imposing establishments.



Field of Arrowroot.

With respect to orange groves, there is no part of Queensland where the climate does not suit the citrus family. But there's one condition which must be alluded to. Unless the sub-soil be well drained—which is by no means the case everywhere, even when the surface soil is magnificent—orange trees will not do. As surely as the tap roots of orange trees strike a wet layer or stratum, so surely do the trees wither at the top and become sickly all over. No sensible man now dreams of planting orange trees where the subsoil is not right. Granted natural drainage, the whole tribe flourishes throughout

Queensland in a manner to leave nothing to be desired, and, once an orange grove is established in full bearing, there is nothing which could be put on the land to yield as large an income with as little trouble. This does not mean that the grove may be neglected, although we have seen magnificent crops of superb oranges from trees which had received no attention for years. An orange grove is too valuable to be neglected and exposed to chances. The soil should be kept loose, weeds extirpated, manure supplied, and a vigorous watch



Young Coffee Trees.





Coffee Plantation, near Cairns.

With regard to cotton, all that can be said at present must be by way of reminiscence and of prophecy. During the Civil War in America the cultivation of the cotton plant was undertaken in Queensland, the high price of the staple and a bonus on each bale exported offering ample inducements. In the Logan and Albert Districts, and in the very suburbs of the town of Ipswich, where a strong



In an Orange Grove.

black soil rests on a limestone formation, extensive fields of the cotton plants were laid out. The success of the experiment, agriculturally considered, left nothing to be desired. The best "Sea-Island" seed was used, and Queensland cotton became highly esteemed by spinners in the West of England. The difficulty and expenses of procuring labour for picking were drawbacks,



which in consequence of the increased populousness of the colony would probably not be now so severely felt. The cultural question was decisively settled at that early period. When the Civil War ceased, and cotton cultivation in the Southern States of the restored Union was resumed, Queensland cotton planters found themselves unable to compete, and cotton-growing had to be abandoned. Its resumption depends solely upon some such alteration of economic and social conditions as shall enable Queensland planters to handle the crop as cheaply as can be done in the Southern States of the American Republic with emancipated negro labor. The substitution of horse-hoes, of the type of the universally known "Planet Junior," for gang labour with the chipping hoe has practically equalised conditions so far as the planting, and keeping weeded, of the cotton plant is concerned. There has recently been patented in the United States a machine for gathering the ripe pods of cotton from the bushes, to be drawn by horse between the rows. If this be successful in practice, it is within the bounds of probability that ere long, after an interval of over quarter of a century, the paddocks around Ipswich will again be under cotton, the sound of the "ginn" resume its almost forgotten hum, and while the progressive town "at the head of the navigation" regains its former title to be regarded as the cottonopolis of Australia, other localities far and wide will participate in the industry.

It must not be supposed that

because the town of Ipswich received a knock when the cultivation of cotton had to be abandoned, the stability of the place was affected. There is no town in Queensland which has shown a more cat-like vitality than Ipswich. The original choice of the site of Ipswich for a settlement was due to the observation by Capt. Logan, the bustling Commandant of the Penal Establishment at Brisbane, in 1827, of limestone rocks close to the bank of the little Bremer River. This canal-like water-course is a tributary of the Brisbane, and was noticed at its point of junction, and named, by Oxley on his second exploring trip up the Brisbane. Just above the spot where Logan discovered limestone the tide ceases to further ascend, and a very convenient retirement of both banks of the river forms a basin sufficient in depth and in dimensions to make a sort of natural dock, where vessels could be moored and turned. Logan's building

undertakings at the Brisbane establishment required a quantity of lime, and here he found the stone, handy to water-carriage, in abundance. The consequence was that a small working gang of prisoners was detached, and there stationed, under warders, to quarry the stone, and kiln-burn it.

The place was called Limestone, a designation by which it was referred to by early colonists, long after official ingenuity had conceived the masterly idea of conferring on it the name of the old English town in Suffolk. The aborigines harassed and menaced the laborers and their custodians, and a few rank-and-file under a corporal were sent up from the detachment of infantry in Brisbane to protect the lime-burners. When the pioneer pastoralists had invaded and occupied the Darling Downs, and seeking communication with the coast forced their way through Cunningham's Gap down into what is now the West Moreton country, their objective point was "Limestone," the out-

post of the Brisbane establishment. Later, when the Government establishments at Brisbane and Ipswich were, happily, withdrawn, and free settlers admitted without restriction, Limestone, or Ipswich, began to grow at once. The non-commissioned officer last in charge of the military guards obtained his discharge and set up in business as publican and storekeeper. A jovial, hearty, blond fellow, perfect stalwart type of the



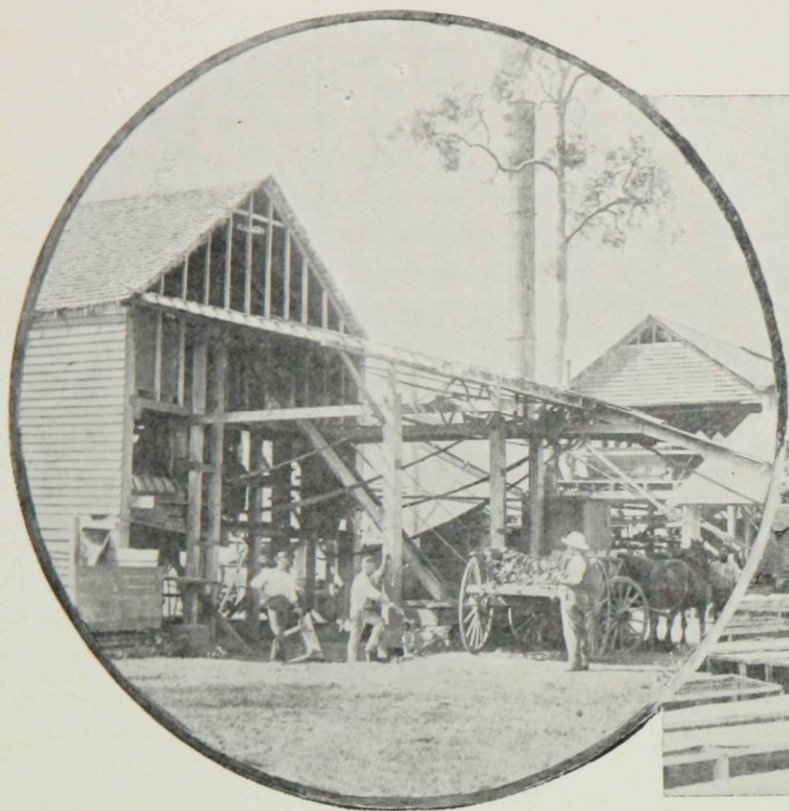
PINEAPPLES—A Field Crop.

Anglo-Saxon yeoman, George Thorn, assisted by a wife just matched with him in temperament and physique, prospered with the place, acquired very considerable wealth, begat and raised a family of strapping lads and handsome lasses, and with his spouse lived and died in Ipswich, leaving pleasant memories—one son to become Premier of Queensland, one daughter to be the lady-bountiful of an English country-house, and all descendants as heritage a tradition of kindness and uprightness.

The pastoral lands lying under the shadow of the great dividing range, and on the head waters of the Brisbane and the Logan and Albert, were in due course occupied as sheep and cattle stations, and Ipswich became the chief town of the region so utilised. But the town had other and more valuable resources. It really occupies a position



of command at the very head of the navigable waters which communicate with the ocean by the channel of the Brisbane River, *via* Moreton Bay.



Arrowroot Manufactory.

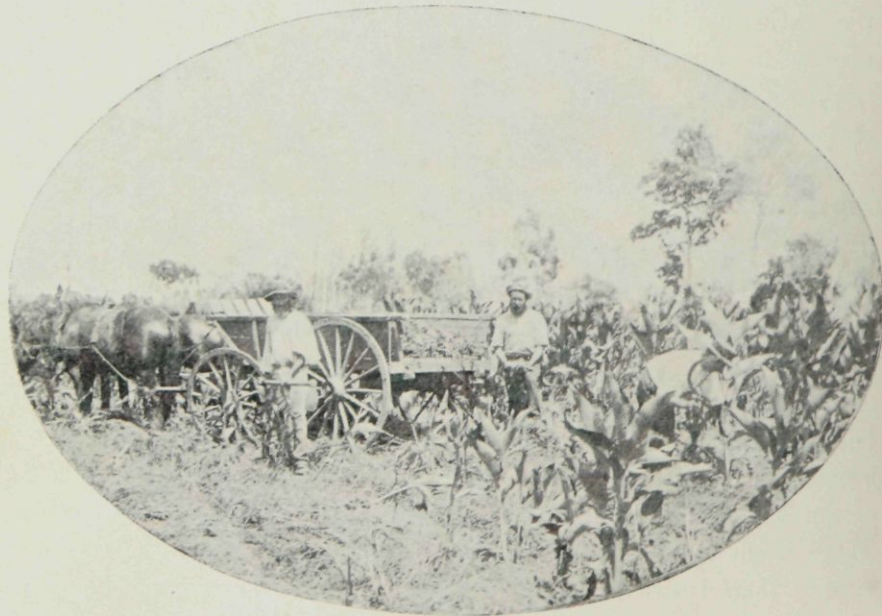
By means of lighters, tugs, and light draught steamers, goods from abroad could be discharged at the wharves near the Bremer basin, Ipswich, at less cost than they could be carted by road from Brisbane warehouses. The distance by the windings of the Brisbane and its affluent, the Bremer, is about sixty miles. By road it was about 25 only. The advantage of carrying a hundred or a couple of hundred tons of merchandise by water in one conveyance in, say, 6 hours, as compared with carting it in two-ton lots, was of course enormous. So it was from Ipswich warehouses that not only the settlers of the vicinage and the squatters of West Moreton, but the pastoralists of the Darling Downs, the Upper Burnett, and, as stations were formed further and further inland, of the Maranoa and the Upper Dawson, loaded their bullock drays. On the strength of their situation the Ipswich traders set up a furious rivalry of Brisbane, which they denounced as a useless and anomalous sort of place, planted on the river side without refer-

ence to any sort of industrial or commercial usefulness: too far up the river to be a seaport, not far enough up to be the proper *dépôt* for goods discharged into lighters for ultimate conveyance to the interior. In short, Ipswich aimed at wresting from Brisbane not only commercial supremacy but metropolitan importance. The struggle lasted for years. In the early Parliaments of Queensland, the representatives of Ipswich and West Moreton combined and were powerful enough to materially influence affairs. When it was determined to afford the

Darling Downs railway communication with the seaboard, the "Ipswich Bunch," as its group of members was known, prevailed in securing that the rail should start westerly, not from Brisbane, but from Ipswich.

When a bridge over the river to connect N. and S. Brisbane was to receive legislative sanction, the Ipswich Bunch contrived to put in a stipulation that the structure should have a movable span, to permit ocean-going vessels to ascend the river towards "the head of the navigation." There was large talk of managing by cutting channels in the bed of the Brisbane where required as far as the mouth of the Bremer, and by straightening the curves of that canal, in which the steam-

boats using it constantly had to be helped round bends, by pushing off with long poles set against the banks, at bow and stern, to make Ipswich accessible for any ship which could then be got through the dredged channels up to Brisbane. Even when that extravagance was abandoned, a determined effort was made to set



Gathering the Bulbs.

up Cleveland, a projecting peninsula in Moreton Bay, as a "seaport," to be connected with the interior by a railway thence to Ipswich direct. This was carried so far that a jetty to accommodate oversea ships was actually constructed at Government expense at Cleveland. It was carried out far enough to give sufficient depth of water at its extremity. But, owing to a small oversight, it was not until it had already been built that it was discovered that, although



A Field of Arrowroot.



there was sufficient depth of water at the jetty end for large vessels, there was no passage through the shoals and mudbanks further out by which any vessel of burden could by any contrivance reach the nice deep pool around the jetty end. Nearly 40 years have since elapsed.

where a successful amateur fisherman has caught from it a shilling's worth of fish with the expenditure of eighteen-penn'orth of bait.

Despite the failure of the attempt to substitute Ipswich for Brisbane as the commercial and perhaps as the political capital



THE TOWN OF IPSWICH.

Cleveland is now connected with Brisbane by rail. The jetty, frequently repaired, is still *in situ*. It is convenient for light-draught steamers to discharge excursionists at. Also, it forms a conveniently private promenade for lovers, including couples who pass their honeymoon at Cleveland. But the vast maritime importance prophesied for it by ardent Ipswich orators has not been realised. It has not been a profitable investment for the State. Perhaps the highest reproductive results realised upon that famous jetty up to date has been

of Queensland, the prosperity of the town continues to grow. By the time that the increased influence of Northern and North-western constituencies abated the prominence of the Ipswich Bunch in Parliament, and permitted the absurd gap in the railway system between the Brisbane wharves and the Ipswich terminus of the railway striking West and South to be filled in, there had been sufficient land thrown open—selected in moderate areas on the West Moreton runs—to settle a considerable population all around Ipswich. The town found itself metamorphosed imperceptibly from an entrepôt for station produce and

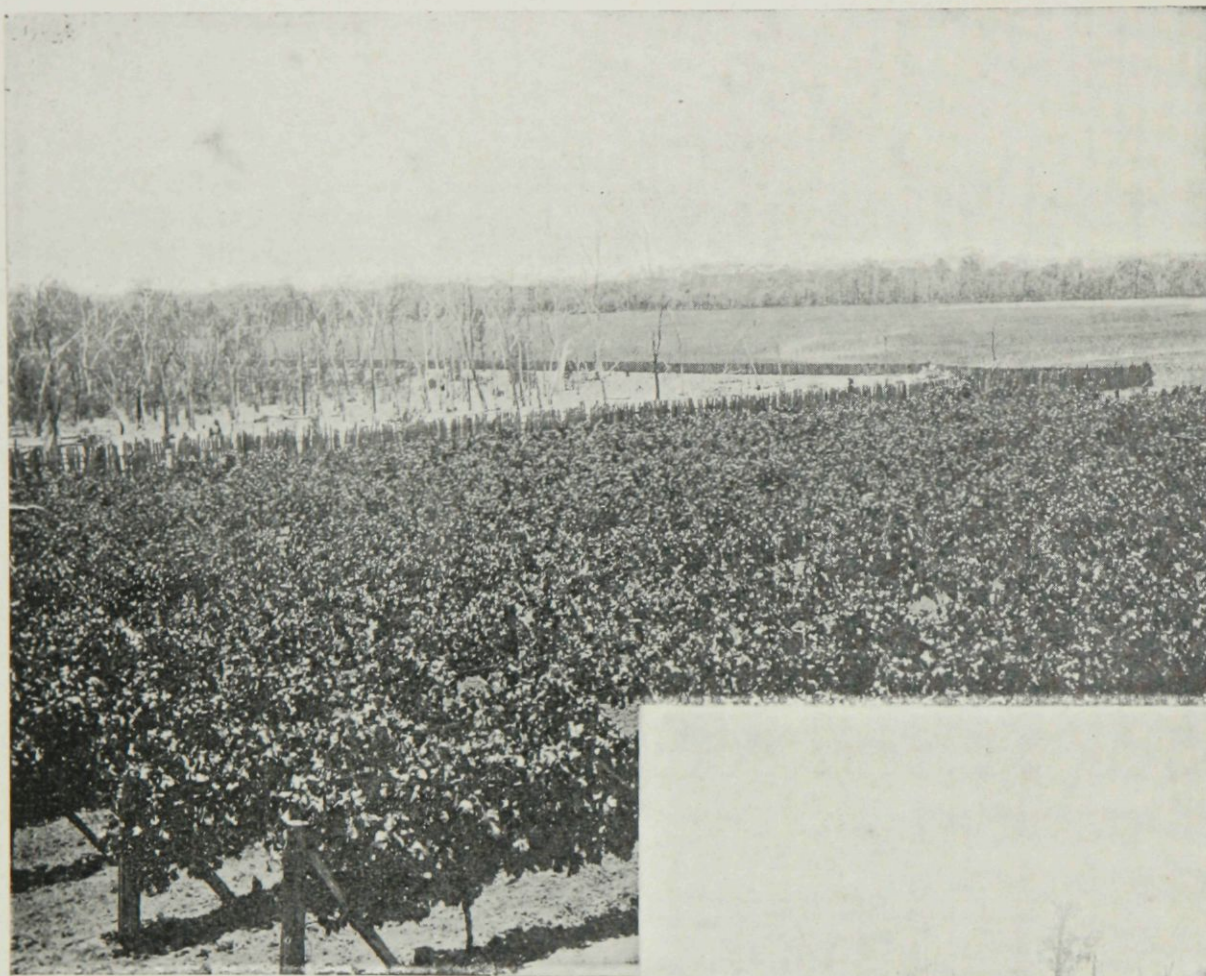
supplies into a mere roadside station on the railway line, but at the same time into the natural capital of a thriving population of farmers and small graziers. Never before had its prosperity rested on so solid and permanent a foundation. Presently, branch lines of railway were constructed, forking off at Ipswich from the main trunk line, and penetrating to the remoter settled parts, where in turn minor townships, in a sense tributary to Ipswich, have arisen.



The cultivation of the grape with a view to the production of wine is an industry which cannot be said to have, as yet, assumed any importance in Queensland. It has already been mentioned that early in the century, while Brisbane alone was a settlement in the whole immense territory of North-Eastern Australia, a variety of grape-vine cuttings was planted by a Mr. Mayo. Thenceforth, if not from even an earlier date, the grape vine has been a commonly-grown climber, to ornament cottage verandas in summer with the cool shade of its foliage and to indulge the dwellers with its bunches of luscious berries.

very common. But in vineyards, where the fruit is cultivated for the manufacture of wine, the system of close pruning and confinement to stakes is universally adopted.

This is an industry of which the possibilities may be regarded as illimitable, but the results accomplished up to the present are trifling and not very satisfactory. Immigrants from Great Britain—of whom and of whose descendants in the first and second generations the population of Queensland mainly consists—do not bring with them, among their qualifications for colonial industry, any skill in viticulture or knowledge of the art of winemaking. Consequently the cultivation of the vine and the fermentation of grape-juice have received but little attention from them. That the industry has any place among the pursuits of Queenslanders is attributable chiefly to the infusion among the population of a certain proportion of emigrants from Germany. A very considerable number of German farmers tend their bits of vineyard for the purpose of making wine for their domestic consumption. Among the many a few have expanded their operations sufficiently to have a surplus of wine. A comparative handful of people make the production of grapes and the manufacture of wine their sole business. The district around Roma, on the Maranoa,



VINEYARD, ROMA.

There is, probably, no settlement, and scarcely a "station" or a "selection," in any part of Queensland to-day where there does not exist at least a few vines at the homestead, grown for shade and fruit. But vineyards, cultivated with a view to wine-making, are of later commencement and much less expanded frequency. It can scarcely be said that even the best method of training the vine to suit climatic conditions has been here determined. It may be doubted, for instance, whether the ancient method still favoured in Italy, and fully described by Virgil in his "Georgics," of festooning the vine from elm to elm, is preferable, or otherwise, to the method of annual severe pruning, derived apparently from the Romans themselves, which reduces grape-vines to mere pollarded stumps in the colder countries, as France and the Rhenish and Danubian valleys, where the triumph of Roman discipline was followed by the introduction of Italian husbandry. In Queensland, with climate chiefly more like that of Southern Italy than that of France and the valleys of the Rhine and Danube, that question should have peculiar interest. In practice, however, viticulture cannot be said to have arrived at a stage in this colony which invites nice refinements about the very best possible processes. In private gardens and orchards, where elegance of effect is sought in addition to excellence of table fruit, extension of vines upon trellises is



VINEYARD, ENOGGERA, NEAR BRISBANE.

is the principal scene of the wine-producing industry, having 518 acres of vineyards, which is nearly one third of the total area of bearing vines in the colony. Around Brisbane, North and South, lie the next largest group of vineyards, followed by Toowoomba, Warwick, Rockhampton, Gatton in the West Moreton District, the Logan, Marburg, Gympie, and other localities in the Southern and Central Divisions. In the Northern portions the industry hardly exists, although there are beginnings at Nebo, Mackay, Bowen, Townsville, Charters Towers, and Herberton. Doubts are entertained whether on the coastal lands so far North, the mildness and brevity of the winter may not militate



against the success of vineyards, by affording the vines little rest from growth and bearing. Experience with regard to other fruit-bearing plants and trees, however, suggests that these climatic conditions may operate somewhat differently, hurrying the vines to early bearing, premature maturity with heavy crops, and the exhaustion of age long before the average duration of vines in colder regions. In fine, vines flourish and bear heavily, and some individuals make excellent wine. But many more make wine which, when they sell it, is not excellent. Judgment, skill, traditional knowledge, are alike lacking. And, moreover, to be fit for consumption, the best of wine, as well as the most

crudely manufactured, needs time to mature. But time to a vigneron means money. To hold over his crops for two, three, or more years would be equivalent to living on his means for these periods. Few are in a financial position to begin in such a fashion. Hence, wines which might be excellent, if kept and skilfully attended to in the wood for some years, are constantly bottled off and sold as soon as made, crude, acid and rank with the *coup de terrain*, that smack of the soil, faintly suggestive of eucalyptus flavour, which is a detriment to many raw Australian wines. Granted

skilful treatment from choice of ground to racking and bottling, and Queensland wines are capable of sustaining any criticism. Werise from the enjoyment of a bottle of Queensland "Frontinac," which has during fourteen years lain on its side, and the contents of which have deposited a "crust" such as would make the heart of a port-wine connoisseur glad.

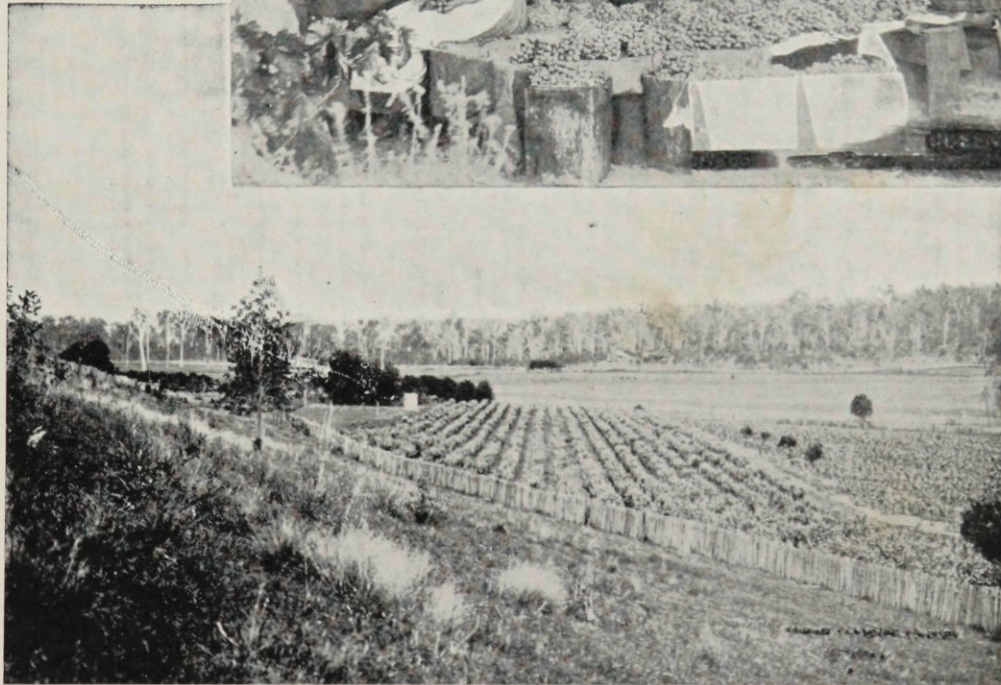
That wine, bland and of delicate bouquet, if consumed when first bottled, would have stung the palate with the infusion of substances eliminated and thrown down in that "crust." But the wine-making industry in Queensland revolves in a vicious circle. Before it can pay vigneron to devote themselves to the production of a first-class wine, and to keep it back, for years, maturing, the existence of a large and discriminating body of customary winedrinkers must encourage them. But until Queensland vigneron produce a sound wine at prices low enough to attract general consumption, the Queensland public will not adopt or acquire the habit of making wine their usual beverage. For some time to come really expert vigneron will continue to make good wine and

money. Vigneron of other kinds will only make wine. In fact, of late years the production of wine has been decreasing, only 131,000 gallons having been produced in 1899, which is little more than half the quantity produced in 1895. In Roma, six winemakers turned out nearly 22,000 gallons in 1899, and Roma wines stand high in public estimation. Given age by keeping, and Roma port would deserve a place in any connoisseur's cellar. At Toowoomba 120 makers turned out less than 20,000 gallons. This indicates winemaking, chiefly for domestic consumption, by German settlers. In many homes of quiet farmers, who make no business of wineselling, a

guest has opened for him a cobwebbed bottle of wine which convinces him that, although Queensland's produce of wine generally may not yet have quality, and certainly is not, in quantity, sufficient to take any important place among her exports, it is not the fault of soil, climate, or grape. Had the world no other source of supply, Queensland would, after a few years' plant-

ing, be able to furnish all that could be consumed. If even a hundred million acres of suitable soil were needed, they are here. In France alone about four and a-quarter millions of acres were in 1899 devoted to the cultivation of the vine, for wine-making, with a production of 1,078,613,800 gallons of wine. In Queensland, with an area more than three times as great, but a population only about one-eightieth of that of France, the area under vines was, in the same year, but 2,000 acres; the liquid product, 131,000 gallons. These

figures, when worked out for comparisons, do not favour an idea that, in any respect, viticulture in Queensland shows to advantage. But, despite the dispiriting present aspect of the industry, there is room for hope, and even for rather bright expectations. In New South Wales—a colony settled half-a-century earlier than Queensland—the wine industry languished until quite recently. But, within the past two or three years, quite a number of wineshops have been opened in Sydney, the capital city, where for threepence, the ordinary price in a public-house bar for a large glass of colonial beer, or a dram of very indifferent spirits, a half-pint flagon of a very fair rough wine, red or white, is sold from the wood, and is finding a rapidly growing demand.



1. PACKING GRAPES, ROMA.

2. A LAIDLEY VINEYARD.



Although we present no illustrations relating to the culture of tobacco, and the manufacture of the leaf to a form convenient for consumption, a word or two relating to the subject is necessary to prevent a hiatus liable to leave a false impression. As in the case of the vine, there seems to be no part of Queensland where the comforting weed will not flourish. But, in order to produce a leaf with commercial value, the locality for its growth must be exempt from the occurrence of violent winds, which cause the leaves to whip themselves into strips, useless to the manufacturers. The plant has been grown successfully, so far as physical conditions are concerned, in the extreme Southern part of the colony, and tolerably near the extreme Northerly limits. At the present time, the principal plantations are at Texas, on the southern boundary of Queensland, and Inglewood, only a few miles further north; while a few acres are

grown near Townsville, and a trifling area at the Cape River, inland from that north-coast port.

The total area under this crop, however, amounts only to 745 acres, the produce of which is 6,551 lb. of dried leaf. It may here be remarked that during the same year, 1899, over 44,000 lb. of leaf tobacco was imported into Queensland from foreign fields; 630,924 lb. of tobacco was locally manufactured during the same twelve months, valued at over £60,000; while there was a total importation of the article in the form of cake, plug, or cut tobacco, of cigars, cigarettes, and snuff, to the extent of 887,895 lb., and a valuation for a Customs duty of £1,117,860. During the same period there was paid excise duty on tobacco manufactured in the colony on a value of £31,628.







**When** the coast railway line was constructed from Brisbane northward, to Gympie as a first stage, to be since extended, *via* Maryborough and Bundaberg, to Gladstone, and thereafter to Rockhampton as one stage further, it encountered at a distance of 50 miles from the capital a range of hills. These are the extension to the seaboard of the watershed dividing the valley of the Brisbane from that of the Mary. Where the railway traverses it, the range is not parti-

cularly formidable in respect of height. But for twenty miles or so the engineers had to find the best route available amidst a very uneven tract of country, which made surveying an exceedingly difficult task. The range rises to 1000 feet in places, and its upper portion consists of a jumble of dells and ridges. A dense vegetation of forest trees, palmettos, and cabbage-palms, and of undergrowth and vine creepers embarrasses progress. The soil is fat, and, when moist, clammy. In



In Strawberry Land.



most parts it is red and of volcanic origin. To its fertility the denseness and character of the scrub bears some testimony. But more than fertility of soil is needed, in Queensland, to sustain a dense vine scrub. There must be rainfall, ample and fairly regular. Now this spur of range, projecting coastward, may be said to produce the rain which renders its soil fruitful. It intercepts to an exceptional extent the moisture-laden breezes from the ocean, and dissolves their watery burdens in copious showers. Here, then, all the essentials of success for the labors of tillage and plantation present themselves. But the deterrents are as formidable as the promises are fair. The amount of labor to be exerted before the native growth can be extirpated and replaced by crops for profit is obviously tremendous. Not to this congeries of abrupt hill and gully, of thickly-tangled brush, overtopped by forest of hardwood trees, can be applied the poetic phrase that tickled with a hoe it will laugh a harvest. No such jocund

provide the sawmills of Brisbane. Sub-contractors, their work on the railway completed, join in the industry. Their sometime laborers transfer their services. The pick and shovel men who are to be seen laboring on railway constructions in Queensland are a class which corresponds in very little with the British navy. Generally they are men who have turned their hands to many employments. They have been diggers, miners, bush-hands, ploughmen, even stock-riders. Among them a large proportion have learned in the school of necessity to be alert for opportunities. In a rock cutting or tunnel, they scrutinize the strata. They examine the gravel and earth when they cut a trench. If they hew a clearing for the line, they observe and estimate the value of the timbers. They consider the soil they shift, and if discomforted in the rude temporary camps by frequent showers they ponder the benefits of such rainfall. Then the timber-getter, if a married man, desires to have his family around him, once he sees a few years'

employment ahead of him in a fixed spot. So with even laborers. Land is cheap, and the process of selection simple, and universally understood. If he determines that he will absolutely settle down for five years at any rate, he can pick out 160 acres or less, at an ultimate cost of half-a-crown per acre for the freehold. But he will be only required to pay threepence per acre per annum, and in ten years the freehold will be his.

He must, within a couple of years, substantially fence his land, or, as an alternative, make other permanent improvements of value equal to the cost of such a fence. These conditions obviously subject him to no hardship. His hut or cottage and the bit of clearing which he must effect, in order to get any good out of his land, satisfy all requirements. The cost of a rough clearing is estimated to average £5 per acre on the



Timber-getting—Loading the Wagon.

playfulness will serve here. The victory of industry must be won by strenuous battle, made by determined men, armed with the axe, the saw, and the mattock. The trunk railway, which traverses the locality and, besides bringing it within two or three hours of the Queensland metropolis, conveys perishable products, with the minimum (consistent with repeated alterations of gauge) of handling, even to Sydney, Melbourne, and Adelaide, ensures markets for vegetable and fruit crops. The appreciation of such a tract of land and its conversion from a waste into an industrial centre, are slow but accelerating processes. First comes the timber-getter. The construction of the railway calls for sleepers. The line has to be fenced. Once this work is completed the timber-getters and the splitters of posts and rails transfer their attention and find employment for their teams of bullocks in cutting out the cedar, the pine, the beech, the hickory, and the eucalyptus hardwoods growing handiest to a railway station, to

Blackall ranges. Sheer muscle and tools could not effect the work for four times the amount. But the forces of Nature are enlisted. The method of clearing "vine scrub" is almost invariable. First the smaller shrubbery and creepers are prostrated with axe and billhooks, a time of the year when a few months of dry weather may be expected being chosen for the operation. When the stuff thus levelled is pretty thoroughly sun-dried, the trees of magnitude are now attacked with axe and, for the bulkiest, cross-cut saw, and are thus brought crashing down upon the layer of brush. When, in their turn, the large trees are ascertained to be well dried, a windy day is chosen and fire applied. If the season has been favourable for drying, the result is splendid. The denser the scrub has been, the more thorough is the consumption. The lower layer helps to ignite the massive trunks and limbs, and, with the exception of the larger stumps and huge boles, the whole is converted into a stratum of ashes, themselves a fine fertilizer.



But the constituent vegetations of scrubs vary very much. There are "vine" scrubs in which the brush is exceedingly dense, and the higher trees include none of the *Eucalyptus* genus. The place of these is taken by a forest of varieties which flourish in brushes only and of which the timber has not yet been fully appreciated. These trees have generally buttressed butts and straight stems, with a bark handsomely mottled, somewhat like the markings on a diamond snake. The timber, if the tree be felled at the proper season and dried in suitable fashion, of many of these should be admirable for a great many purposes. It is invariably close in the grain and susceptible of a high polish, but otherwise its peculiarities are infinite in the different species. Some there are which easily split into laths to almost any length. "I have seen," writes an observer, "a coach-wood tree which had been crushed by an immense pine falling right into its crest. The coach-wood, buckled by the blow and the weight, had not snapped, but had split, almost from butt to the parting of the branches, into a great faggot or bundle of laths." Scrub trees of this kind, when felled and dried by sun-heat, seem to lose the solidity of their grain, and decay rapidly into a sort of dry pithy condition. When enveloped in the fierce flames of burning-off, such trunks as are not consumed in the conflagration continue

smouldering from the ends like one of the familiar sticks of Chinese incense, and by degrees resolve into a stripe of feathery ashes. Even their stumps smoulder and go far towards complete consumption. But scrubs of this kind, so favourable for burning off, are not universal. Where the *Eucalyptus* grows in the scrubs, the burning is not so complete at one operation. The gum trees, black-butts, and so forth, require mutual help for their burning. Where two heavy trunks or limbs fall so as to cross, or to be heaped together, those portions

will be reduced to ashes. But where a big shaft falls so as to rest alone merely on the kindling of shrubbery, it will generally resist the fire; and, after the "burning off," the ground will remain strewn with an aggravating jumble of blackened heavy tree trunks, which have generally to be left lying for another season until a first crop has been got off the ground. Thereafter, they are chopped where necessary to make them fit, drawn into heaps by bullock teams, and once more set alight. This second firing generally gets rid of them. But

the stumps are still more intractable. The stumps of the regular scrub-woods as above described will as to many kinds perish of themselves by a sort of dry rot. But the stumps of *Eucalyptus* are terrors, and if not grubbed out or extracted by appliances made for the purpose, but generally too expensive, although not very costly, for the struggling pioneer, will continue to obstruct cultivation for a score, or scores, of years.

It is, of course, an absolute necessity for settlers, as a class, to secure, at the earliest possible moment, a crop from their land which will enable them to keep the wolf from the door. No sooner have the embers from the burning-off ceased to glow than the selector is on the ground, hoe in hand, dropping kernels of seed maize in rows as regular as the remaining obstructions permit. The seed sinks into the light ashes, and

a slight stroke or two suffices to stir the earth about each dropping. In some instances indeed when the bed of ashes is deep and the soil friable, and when it has been decided to risk something in order to plant the maximum possible, hoeing is dispensed with altogether. An early fall of rain makes all right. The seeds germinate in their covering of nitrogenous ash, their sprouting root-filaments insinuate themselves downwards into the soil, and, if weather-conditions continue favourable, a bounteous crop results.



Timber-getting—A Tram from the Forest.



But fruitgrowing is the recognised speciality of this tract. Especially the cultivation of the citrus tribe, and, as the cleared area is extended, plantations of orange and lemon trees extend. Still, under the most favourable conditions a grafted orange tree, which yields three or four years earlier than a tree grown from seed, gives no crop till three years after planting, and even then the yield is not great, while the tree would be all the better in future were it not permitted to mature its fruit till the fourth year. Some settlers manage to have their bit of cultivation for vegetables for household use, and to indulge their fancy in experimenting with bye-products. There has for over 30 years been some cultivation of strawberries about Brisbane. There was a small garden of that fruit as far back as 1868, cultivated by a market gardener on the alluvial terrace, once dense scrub, of the river on the south side. The plants yielded fairly well; the fruit was of good size and colour; but the semi-tropical conditions on so low-lying a site proved unfavourable in one respect. The characteristic flavour was faint, and the berries comparatively insipid. Still many people liked to have a bed of

strawberries in the garden. On the Blackall ranges, it was speedily noticed that the strawberry plants flourished exceptionally well, that they bore abundantly, that the fruit was of superior average in size, form, and colour; and, above all, that the subtle and delicious aroma, upon which their favour eventually depends, was present in full lusciousness. Here, therefore, was the very thing longed for; a plant which would yield returns in a single season, and for the fruit of which a constant demand at remunerative prices could be depended on. Now, while the orange groves are maturing, strawberry beds have been planted in nearly every clearing. Over 50 tons of strawberries were despatched by train to Southern markets from the Palmwoods railway station in one season.

It will readily be understood that in such a locality almost any semi-tropical and most tropical growths will flourish. Bananas, pineapples, and coffee are cultivated. The uneven surface of the land discounts such products as are most



Sleeper-getting, Blackall Range.



Hauling Logs to the Mill.





Among the Stumps—Near Cairns.

economically dealt with in extensive fields. Naturally, all the land lying within easy access of the railway has been appropriated, yet the district is only in the primary stage of development. Much capital, or considerable time, is required to clear off the dense tree growth. But a secondary stage has almost been reached. The pioneer selectors are being followed up by intending settlers and speculators possessed of means. The possible and almost sure returns which lands so situated and so fortunate in natural conditions will return to investment of capital and labour are recognised and prospectively capitalised. The farm lands which the earlier adventurers were enabled to acquire for 2s. 6d. per acre in yearly instalments of 3d., are now changing hands to newcomers at such rates as £5 per acre for land in a state of nature, and £10 per acre for areas cleared and ready for cultivation.

It might be supposed from the foregoing that, for the intending settler or immigrant of to-day, opportunity of acquiring at first hand from the Government areas of land on the exceedingly favourable conditions already stated, and in advantageous situations, do not exist. The earlier comers might be regarded as having forestalled all later arrivals or future generations, and left for them only the refuse tracts. But wider knowledge and consideration of the actual facts will clear away this misconception. The same notion has temporarily disturbed the minds of successive corps of new colonists. It is

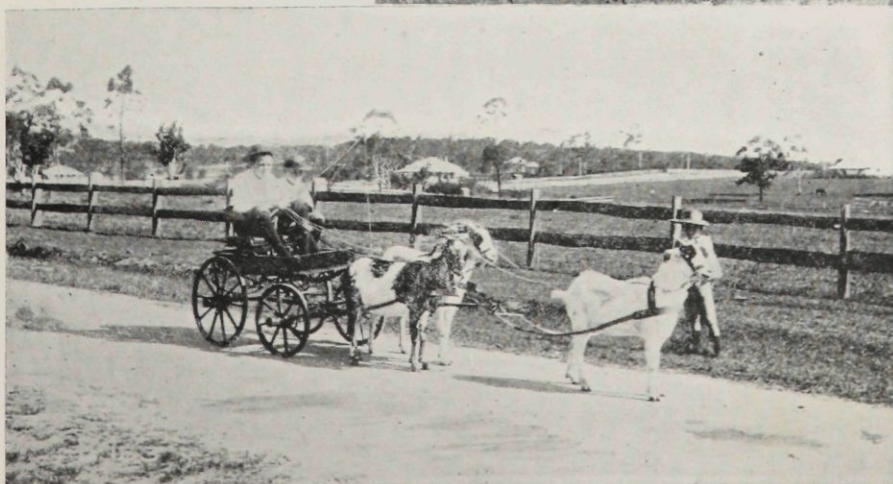
true, indeed, that almost as fast as lands have been rendered available for profitable occupation, they have been appropriated by the settlers of the periods. Even in the seventies, it must have appeared to persons arriving in Brisbane, for example, that all the territory within reasonable distance of the metropolitan market had been acquired by earlier colonists. And, in a somewhat less degree, a similar impression must have been felt by immigrants who came ashore at northern ports. The nearest and choicest tracts had been divided among the prior arrivals. And to-day the second and even third generation—the sons and grandsons of pioneer Queenslanders—have had their pick.

But the very settlement we have just been treating of illustrates the fallaciousness of such disheartening ideas. Free settlement was inaugurated in 1840, and alienation of lands on a restricted scale, and for cash down, was the rule nearly till the colony was separated from New South Wales. But, with a Parliament of their own, greater liberality in dealing with the lands ensued. In 1868 half of each “run” in the regions nearest the coast was thrown open to selection, and a few years later most of the remaining portions of these huge areas were rendered available. Thus the scrubs of the Blackall Range have been at the disposition of anyone who fancied such lands for nearly 30 years. Yet their actual appropriation is a thing of but



Children at Work.

PICKING STRAWBERRIES.



Children at Play.

yesterday. The facts were that until certain conditions were brought into existence they were totally useless. If climate were the only desideratum, all Queensland seaboard regions enjoy such climate as fosters some sort of cultivable



plant of industrial value. If rainfall were the crucial point, there are vast areas hemmed between the mountains and the Pacific, north of the tropic, where the wet season is regular, and the rainfall more than ample. If excellence of soil were specially exacted, there are millions of miles of rolling down on the western and northern watershed, equal in quality of soil to the choicest stretches of the famous Darling Downs. It was not even this combination of soil, climate, and rainfall, which gave the Blackall Range lands their attractions. It was not accessibility, for access was difficult—till the railway penetrated thither.



Blackall Range Lands—Reclaimed from Forest and Scrub.



Blackall Range Lands—Stumps are Gone; The Plough has Come.

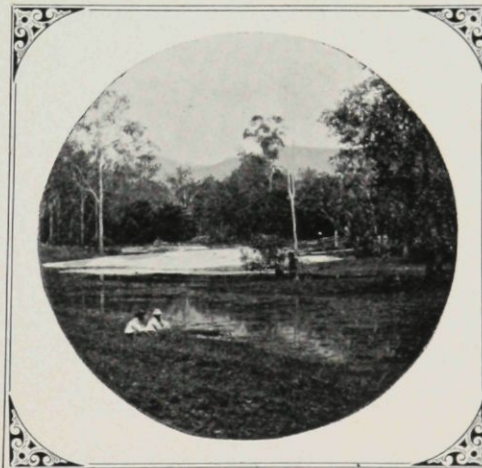
That was the final quickening influence. When that touched the locality, its value as a place where human industry could advantageously be applied to it began.

So, also, with the construction of new railways and additional branches, other tracts, at this moment as useless and unavailable as were the ridges of the Blackall ranges, will assume attractiveness and value. While these pages are being written, a body of Commissioners are actively investigating a number of suggested routes for new Railway lines, and extensions of existing ones, and among the reports of their progress comes a statement respecting a visit paid to another area of scrub land,



this same range, a few score miles inland, where the rich chocolate soil and other conditions give gracious promise of a thousand prosperous settlements, should convenience of transportation and access be provided. The difficulties and toils which have to be overcome by the agricultural settlers on scrub lands are indeed formidable. Stout hearts, strong arms, indomitable perseverance, severe thrift, and expertness at most kinds of bush labors, the selector must have, to enable him to conquer in the first campaign. But, if the locality has been judiciously chosen, the reward may be ample. It has been deliberately stated by a grower in the Blackall Range country that the gross return for strawberries from one acre of plants was in 1899 about £120, while the

expenses were £40, leaving a nett profit of about £80 per acre. The choicest berries, carefully packed in shallow boxes, found purchasers in Brisbane and the Southern cities. The smaller fruit is in demand by jam-makers, at about 2½d. per pound, in any quantity. Again, the slower growing permanent plantations of the citrus fruit trees give assurance for the future. On one orchard a representative of the *Brisbane Courier* was shown seven-year-old trees, almost over-burdened with fruit. One Seville orange tree of that age blazed with a golden crop, estimated to weigh four hundredweight. In another part of the same locality orange trees, said to be about eleven years old, ranged to a height of twenty feet.





# THE Western Country



## General Sir Thomas Mitchell

veteran soldier of Peninsular wars, translator of the Luciad of Camoëns, first inventor to suggest the application of the screw principle to the steam propulsion of ships, Surveyor-General, in succession to Oxley, of New South Wales, was an explorer of considerable stretches of what is now Western Queensland. By way of digression it may be here mentioned that Mitchell's notion relative to screw propellers is said to have originated from his observation of the flight of the boomerang. A remark is ascribed to him, in reference to Allen Cunningham's discovery of the Darling Downs, to the effect that Cunningham might discover another Australia, but never another Darling Downs. A score of years later than Cunningham's expedition it fell to the lot of Mitchell himself to prove the erroneousness of that somewhat incoherent prediction. It must be borne in mind that neither Mitchell nor any one else in the early decade of the nineteenth century had the flicker of an idea that the Darling Downs were to be regarded in any other light than as a tract for depasturage of stock. Half a century had to elapse before the pastoral lessees, half annoyed half amused by

the assertions of individuals among an increasing population, that their leaseholds should be parcelled out among agricultural settlers, had been shamed out of reiterating their habitual declaration that "the Downs would not grow a cabbage."

Mitchell, then, was fated to give a practical contradiction to his own prophecy. He harboured an unworthy jealousy of Leichhardt, which however stimulated him to useful undertakings. In 1846, the same year as witnessed Leichhardt's reappearance in Sydney, as one from the dead, after his successful journey from the Darling Downs to Port Essington, in the extreme north-west of the continent, Mitchell, with a formidable array of followers, marched forth from North-eastern New South Wales to accomplish by a journey through the heart of the continent that which Leichhardt had effected by keeping comparatively close to the seaboard. Mitchell had sneered at him as "a — coaster." Yet Leichhardt had kept sufficiently far inland to traverse on the heads of the Dawson, of the Comet, particularly on the upper waters of the Fitzroy, tracts of beautiful downs country, in some parts indeed much intersected by heavy scrubs of brigalow, but which almost challenged the Darling Downs. The now well-known

Peak Downs were among his discoveries in this region, and when, further advanced, he passed to the district which slopes towards the Gulf of Carpentaria, he marched across magnificent stretches of black-soil plains and downs, which only distance from the seaboard, an accentuated lack of surface water, and a torrid summer climate prevented from wresting the supremacy of richness from even the Darling Downs themselves.



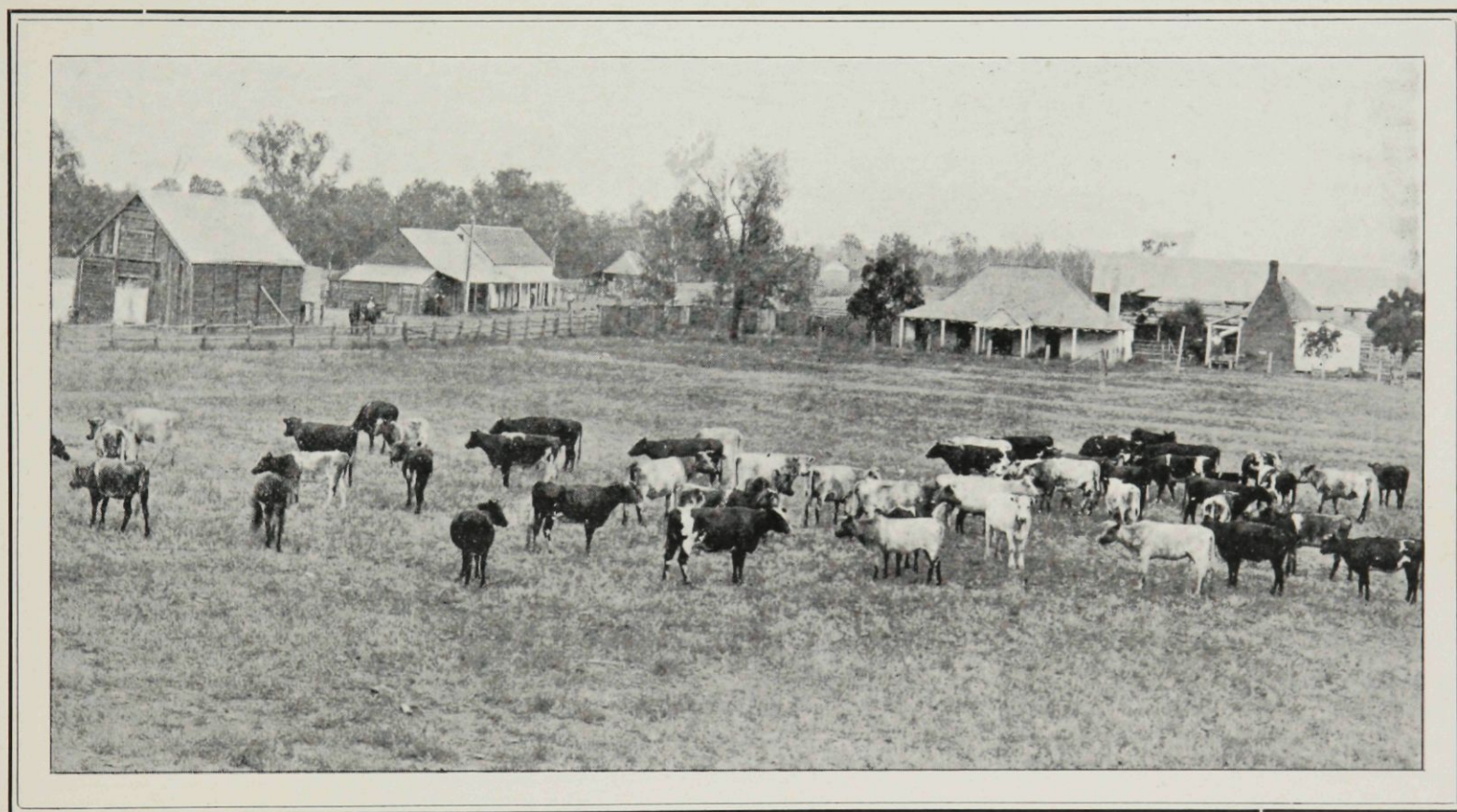
A South-western Station—Callandoon.



So bountiful, however, has Nature been in the distribution of rich, open, and attractive lands, of the prairie order, in the Western and Northern divisions of Queensland, that Mitchell himself, pursuing his inland track, had the satisfaction of seeing spread before him, week after week, expanses, apparently almost illimitable, of country no less endowed with beauty and no less prodigal in promise of prosperity to future occupants, than any portion in Australia, the Darling Downs not excepted. It scarcely comes within the scope of this work to describe at length the course of any explorer. But it is interesting and apposite to notice the impression made upon "the first that ever burst upon that silent sea" of rolling downs, by the landscape. We are enabled to-day almost to trace the emotions which successively stirred the mind of Mitchell as successive tracts of beautiful country were reached, by the nomenclature he applied to natural features, and which is still in use. In the instances where he endeavoured to

answer "balon," which was indeed the name in the tribal dialect of a stone tomahawk. So down went the word Balonne in the notebook, as the name of the watercourse to all time.

But when we come to European names attached by Mitchell to places he first of all Europeans invaded, the current of his thoughts is easily followed. After Fitzroy Downs, which discharged his loyal obligation to the Governor of N.S. Wales, we have Mount Abundance. Again, having passed over unawares from the southern watershed to the head waters of Fitzroy, the cultivated tastes of the translator of Camoëns rejoiced in landscapes so romantic and picturesquely lovely that he almost imagined himself to be looking upon scenes which had inspired the brush of Claude Lorraine, or of Salvator Rosa. Mitchell dwells upon the loveliness of these localities. In his journals he records how struck he was with the semblance of Gothic keeps, cathedrals, and mediæval castles, presented by detached rocks, crowning isolated



Western Country—Callandoon Head Station.

ascertain and preserve the aboriginal names, this, of course, does not apply. There has always been found risk of misconception in such attempts. It is generally known, or believed now, for example, that Cook was confused into appropriating the sound "kangaroo" as the name of the largest Australian marsupial.

Similarly it is a current tradition among bushmen that Mitchell was misled into giving the name of Balonne to the first watercourse he ascended on his expedition. The story goes that the explorer had managed to get some aboriginals to communicate with him, and, to court their good will, sundry treasures were displayed. Mitchell, with one of these prizes, a tomahawk, in his hand, pointed to the river and signified his wish to know "what name." But the savage, whose faculties at the moment were concentrated on the magnificent property in the inquirer's hand, misconceived the object of inquiry, and made

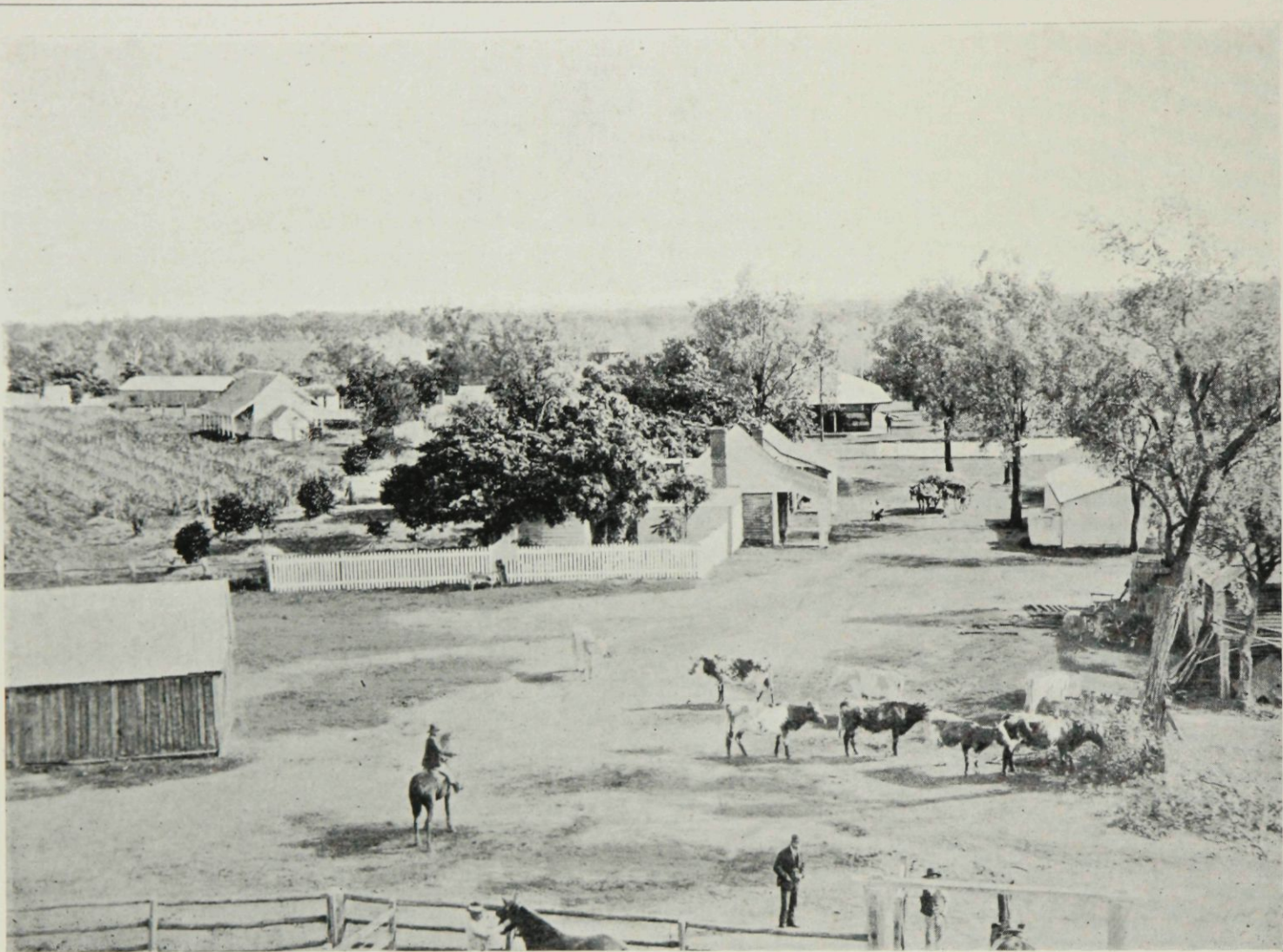
eminences, and visible to him over the trees. Here the "Salvator" winds its way, and where, not far distant, a champagne country expanded into mellow distances, the name of "Claude" honours—and is honoured by—the scenes. Not far remote, Mantuan Downs associate an exquisite tract with those plains of Lombardy for whose rich possession torrents of blood have flowed, from earliest European history almost to our own day.

But no Alps, no Appenines, look down in majesty upon these lovely scenes. There are no winter snows accumulated on lofty mountain peaks to store the moisture from the clouds, and to yield it in melting mood to the bland coquetteries of the spring and the irresistible ardours of the summer sun. There is no Mediterranean close at hand to yield water for cloud conveyance. The Pacific Ocean lies afar, and its tribute of moisture is intercepted by



ranges which intervene. The beautiful land which extends hence, Westward beyond the boundary of Queensland and Northward terminates in Lieutenant Stokes' "Plains of Promise," on the shores of the Gulf of Carpentaria, is, ordinarily, a thirsty land. The water-courses, rain-fed at long intervals of time, carry torrents which overflow any low-lying tracts along their borders, but for the greater

distances to water, or with comparatively small numbers of sheep shepherd around the more permanent waterholes, the spells of prolonged drought to which these regions are subject were inconvenient only. But when in the course of time the flocks increased, these afflictions brought disaster in their train. Tanks scooped in depressions are costly. Dams across creek beds are swept away in flood time, and,



Mount Abundance Head Station.

part of the year, and, unfortunately, sometimes without change for more than one year, are channels most part void of water, and often even grassless, in which pools at remote intervals are slowly yielding to the parched air their dwindling and stagnant contents. During the earlier stages of pastoral occupation, when the country was either lightly stocked with cattle, which could graze far afield and travel considerable

when thrown across flat gullies, generally have too shallow a storage. The glowing sun and drying winds speedily lick up the bulk of their contents, and in tank and dam alike the receding water leaves a margin of gluey mud in which the stock, weakened by lack of sustenance in the drought-parched pastures, were trapped to perish by hundreds.







**UNLESS** the whole region were to be degraded, commercially, to the maintenance of a minimum of stock ridiculously disproportioned to even their average carrying capacity, some other supply of water was imperatively required. It was forthcoming. Amidst a hundred speculations and conjectures how the wants could be supplied, the possibility that artesian borings might strike a supply of water did not escape attention.

Mr. Jack, till lately Government Geologist of Queensland, refers to this subject. "The great drought which prevailed in the year 1885 brought about a feeling akin to desperation, and I was sent, along with Mr. J. B. Henderson, Hydraulic Engineer, with instructions to study the structure of the Western Country, and report whether there was a chance of success in boring for artesian water, and, if so, to determine the site of the first experiment. I came to the conclusion that the conditions were similar all over the Western Downs; that the strata of the 'Rolling Downs Formation' cropped out on the flanks of the eastern range, and dipped westward under the plains, with undulations of which we had, and could have, no data, so that it was impossible to predict at what depth water might be struck in any individual case. In these circumstances we recommended that the first bore should be made at Blackall, which appeared at the time to be in the sorest need. The bore at Blackall proved successful, although, owing to an accident, it was not the first to strike artesian water, the Barcaldine bore having carried off that honour. Since then boring for artesian water has been carried on vigorously all over the Western Interior, and a week seldom passes without information reaching me of the success of some fresh bore."

American ingenuity, directed to the immense rewards of successful deep boring for petroleum in the oil regions, had simplified and cheapened methods. Experts and modern plants of boring appliances were imported or presented themselves. Success was immediate, and although not uniform either as to depth required to tap a supply, or as to the quantity yielded where the source was penetrated, was, broadly regarded, far-reaching and complete. Not every bore indeed ever reached a water-yielding stratum. But the failures were the exceptions, and successful borings the rule to the extent that, up to June, 1898, of



Water-channel—Fed by Artesian Water from No. 1 Bore, Woolerina.

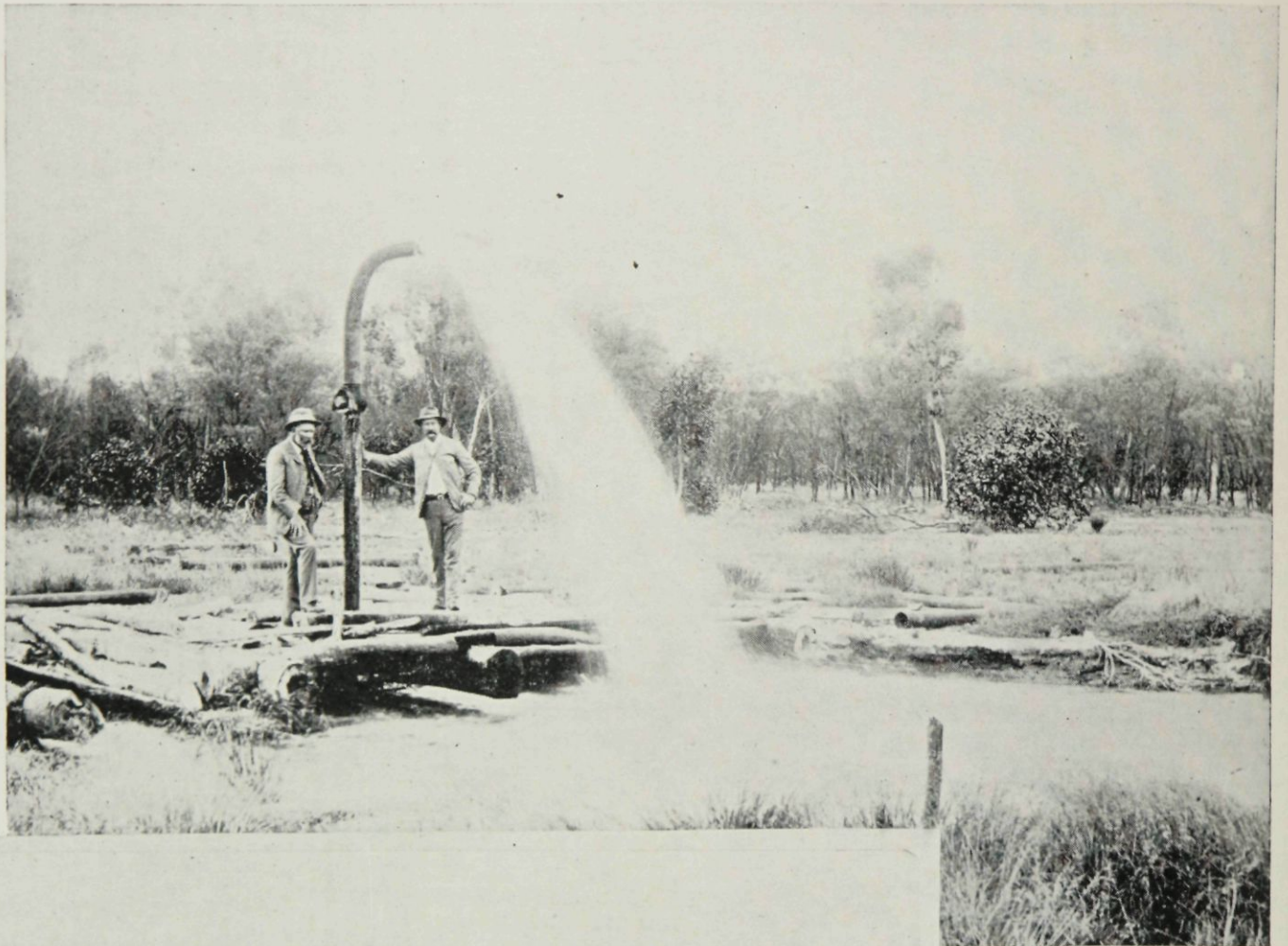
582 bores put down by private enterprise 379 resulted in overflowing artesian supplies, 7 struck sub-artesian flows, and in 62 water rose in the bore high enough to be pumped to the surface. Bores effected by the State Water Supply Department did not show so high an average of successes. But these were to a great extent pioneering work. They were generally experimental to test the possibilities of tracts of country



where private enterprise had not adventured. Of 41 such experimental borings 19 had either been abandoned or not carried to the intended depth by June, 1898; but 16 had tapped overflowing supplies, and in 6 more the water rose within pumping distance from the surface.

Abundant matter for controversy has been furnished by the seeming eccentricities connected with the various temperatures of the waters discharged by different bores, the unequal quantities of the flow, the depths at which supplies are struck, and the height to which the water rises in the bores or jets above the mouths of the tubes. But underlying all these debatable topics, affected by each of them, but combining and transcending the interest of all combined, are the questions—Whence is the subterranean store of water derived? what source or sources supply it? and is it likely to be perpetual or exhaustible by multiplication of

activity, equally of body and mind, on the part of the officers of the Queensland Hydraulic Department. But even before any considerable quantity of data could be collected by the special department



Water from Bore at Murweh Station.

outlets? The field for investigation is so vast, and the scientific labourers in it so few, that the quantity of observations already garnered is quite surprising, and appears to testify to remarkable

regions least favoured by rainfall, the pole of the well-borer caused water to gush from the parched soil as freely as though every manipulator of the tool were a Moses and every pole a rod of Thaumaturgic power.

entrusted with the execution of boring work and the supervision of the system, considerable attention to the general distribution of the water-yielding and water-absorbing strata had been given by the Government Geologist. The officers of the Geological Survey Department had given the subject attention, and had at least sifted out and cast aside speculative opinions regarding the source of supply, which at first distracted attention from scientific methods. Thus, in the work already quoted from, Mr. Jack, while uncertain to what source of supply to ascribe the stores of artesian water, is decisive in rejecting one theory which had been meeting with some popular acceptance. Unscientific people were bewildered at the knowledge that, in the heart of the



They could discover, they could conceive of, no adequate source of supply within the bounds of the Australian Continent. To some extent, Mr. Jack, up to 1892, shared those doubts, and expressed them in a passage which is worth quoting, were it only for the definition of theory with which it opens. "The commonly accepted theory of artesian wells," Mr. Jack wrote, "is that a permeable stratum, with impermeable strata both above and below, carries water from its outcrop down to whatever depth it may be buried beneath accumulations of later date, and that, on tapping the water-charged stratum, the water will rise to, or near, the level of the outcrop of the stratum. Till lately I have rigidly adhered to this theory, which perfectly accounts for some of the best known artesian wells of Europe and America; but, in the case of the Queensland wells, it is doubtful if the strata in which the water has been tapped crop out at elevations sufficient to give the pressure required to raise the water to the surface."

While, however, thus in doubt how to account for the pressure exerted by the artesian waters liberated by the bores, Mr. Jack vigorously repulsed the alluring theory that the pressure of water implied by Australian artesian wells may be derived from strata in the mountains of New Guinea, or even of the Himalayas. "It must be recollected," he remarked, "that only open and porous strata can possibly act as conduits for water, and that strata of this character (gravels, conglomerates, grits, and sandstone) are necessarily local in their distribution, as they could not possibly be deposited in a deep sea far from land."

As regards the continuity of cretaceous rocks of the Rolling Downs age from Queensland to India, the idea is too extravagant to be entertained for a moment by any Geologist."

With the additional information since that time collected by the Hydraulic Department, of which Mr. J. B. Henderson, M.I.C.E., is head, doubts have been removed. The area under which the Cretaceous formation lies, which is the chief water-storing stratum, has been approximately defined. That area may be described, roughly, as stretching westerly from the summit of the Main Range, which divides the river-systems of the East Coast from those which trend to the South and the North. This formation apparently extends westerly as far as the valley of the Hamilton River, a head of Eyre Creek; beyond which, to the W. and N.W., the geological conditions are not favorable. The actual superficial extent of the tract under which the water-storing strata lies has not been calculated. Probably exact information is inadequate to justify any pronouncement. But conviction has grown with investigation that what Mr. Jack termed "the commonly accepted theory," which perfectly accounts for many artesian systems in Europe and America, adequately explains the conditions in Australia also. Mr. Henderson, the Queensland Government Hydraulic Engineer, has not, indeed, committed himself in his latest official report to any opinion. But from the maps and other material published by the Department, it may be gathered that if a judgment were pronounced to-day it would be that the underground stock of water is derived exclusively from absorption of rainfall on Australian territory. Stated in terms for general readers, the conditions are that the Cretaceous strata, the porous rocks and beds, rise to the surface and protrude all along the main range which separates the river-systems of the East Coast from those which discharge their waters North and South, in the Great Australian

Bight, and in the Gulf of Carpentaria. The porous strata dip, however slightly, chiefly to the West and South, but perhaps there is a separation which throws some of the absorbed waters North instead of South. The Cape York Peninsula may have a system of its own, but data are insufficient to warrant any unqualified assertion.

The important feature is that, accepting the theory, or the proved facts, the artesian water supplies of Western and South Western Queensland are simply the storage of rainfalls absorbed along the flanks of the Great Dividing Range, the vital question whether the supply is practically infinite or is conceivably exhaustible by multiplication of well-bores, or by unchecked flow from a limited number, answers itself in the restrictive sense. What may be termed the area of absorption is so inferior in extent to the area of storage, the surface of which requires to be artificially moistened by distribution of water from the subterranean accumulations, that expectation of a future when boundless fertility due to universal surface-irrigation shall prevail is paralysed.

The subject is complicated by other considerations. Some hopes of a fuller supply than can be furnished exclusively by absorption of the rainfall on the surface along the line where the Cretaceous strata

are protrusive may be entertained. Mr. Jack, in a pamphlet published in July, 1896, emphasises "the observed fact that numerous important rivers disappear on crossing the outcrop of the lowest beds of the Lower Cretaceous Formation." "There is nothing," he affirmed, "in the world to lead us to doubt that the water is absorbed by these strata, and carried down by them beneath the impermeable clay shales, which underlie the soil of the interior. This would permit the inference that, in addition to the soakage along the band of territory flanking the Dividing Range where the Cretaceous formation outcrops, the subterranean stores of water are contributed to by interception



Struck Water! Winton Bore.

and absorption of a proportion of the rainfall upon extensive tracts of country where the rocks are impervious. Thus in rain time trickles unite into rills, rills into brooks, brooks into creeks, and creeks into rivers. The accumulated waters flow in the river beds over the impervious strata till, at some remote point, they reach a different and bibulous series of rocks, where absorption is so great as to reduce or even almost terminate their flood." An example of this process is furnished by a quotation from a letter by Mr. A. Gibb Maitland, C.E., F.G.S., written in June, 1896:—"The Upper Flinders cuts its way through the escarpments of the Blythsedale beds, which are here of such a character as to be admirably adapted for the absorption of and transmission of water. . . . Before entering the sandstone, &c., the Flinders is a fine running stream of considerable width; down the cañon by far the greater portion of the water has disappeared."

Observations corroborative of this possible accretion to the subterranean water are adduced by reference to remarks of Mr. H. C. Russell, the Government Meteorologist of N. S. Wales, relative to the discharge of water past Bourke, as contrasted with the mean annual rainfall on its catchment area. Qualified by some calculations by Mr. J. P. Thomson, then President of the Queensland branch of the Royal Geographical Society of Australasia, the allegations stand



that the Darling at Bourke carries off only about 6 per cent. of the rainfall on its catchment area, leaving thus 94 per cent. to be accounted for by absorption and evaporation. Passing reference may here be made to speculations touching discharge of fresh water from the Cretaceous beds under the ocean, in the Great Australian Bight and also in the Gulf of Carpentaria. Disputation on this topic still continues, and it is no part of our task to meddle in contention.

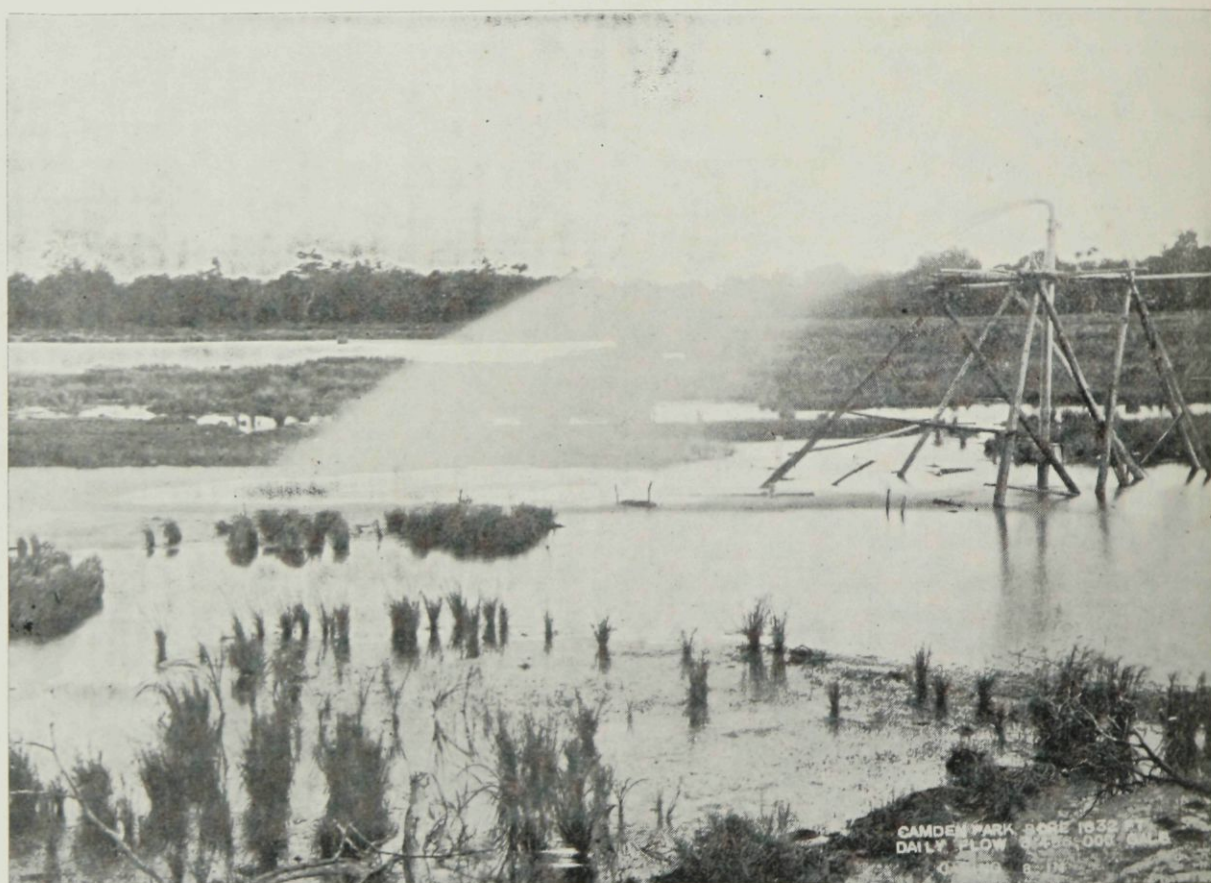
When it is considered that the future of these vast expanses of rich plain and rolling down must be controlled by an always available artificial provision of moisture which Nature withholds so far as any approach to regularity of rainfall is concerned, the importance of the subject must be recognised. In default of ample resources of subterranean water, surface storage of the superabundance which at long intervals falls from the clouds, and substitutes for devastation by drought devastation by inundation, must be the alternative resource. But here, again, evaporation has to be considered, and almost forbids hope of substantial relief from that method. Mr. Russell, the New South Wales Meteorologist, already mentioned, stated in a letter written in July, 1896, that he had for a number of years measured the actual evaporation in the western interior of that colony. The greatest recorded amounted to 5 feet 5 inches in one year. There are localities in the S.W. corner of Queensland where the mean annual rainfall has been but little in excess of the odd inches; and even taking the western and north-western country generally, the average mean does certainly not exceed two feet in the year. That is, say: If the rain falling upon three acres were not absorbed at all but drained into an excavation six feet deep extending over one acre of the three, sun and air would dry such a tank in a little over twelve months. But all such calculations give ridiculous conclusions. Excavated tanks are excessively costly when compared with their storage capacity. Relief from such expedients could be no more than trifling contrasted with the hugeness of the territory to be dealt with.

There is some consolation in a hope that a still further accumulation of information relative to the artesian supply may lead to more encouraging deductions than at present seem to prevail. Eight years ago, in 1892, Mr. Jack appeared even more despondent about the then immediate future of artesian supplies than seems to be the feeling among the best authorities to-day. "For the sake of argument," he wrote, "I have summed up the amount which would overflow from *all* the Queensland bores . . . if they were allowed to run without check. The total amounts to 58,177,760 gallons per day, or 21,234,882,400 gallons per annum, which is equal to the total annual rainfall over nearly seventy-two square miles, taking it at an average of 20.45 inches." Then, after some reflections regarding the area of absorption, he continues:—"It may, therefore, be safely predicted that if artesian wells become much more numerous, and if all be allowed to overflow, a diminution of the supply may shortly be looked for. . . . It seems to me that the use of the water should be restricted to stock watering and town supply. Even irrigation I should regard as wilful waste, unless indeed, after the lapse of years, there should be found to be no diminution in the supply."

Mr. Jack's apprehensions have not, up to the present time, been justified by events. It is true there has been a falling off in respect to pressure and flow in particular bores. In November, 1898, Mr. Griffiths, Bore Inspector, made a special re-examination of the

Charleville Bore, and reported that the flow, which was estimated at three million gallons in 1889, had fallen to two millions in 1898. But, on the other hand, multiplication of bores had proceeded constantly since Mr. Jack uttered the warning quoted above. The total continuous yield "from 440 bores, at which the flow is known or estimated, is now," writes Mr. Henderson in his 1899 report, "totalled at 260,377,050 gallons per day." That is to say, the aggregate flow has been increased little less than five-fold since Mr. Jack predicted or apprehended a diminution of the supply.

Irrigation, which he condemned as wilful waste unless, after the lapse of years, there should be found to be no diminution in the supply, may therefore, since that exception has been realised up to present, be still regarded as not utterly hopeless as a resource for fructifying these regions. What has been done in that application of the artesian water is so trifling as scarcely to be worth notice. But the latest report of Mr. Henderson, for 1899, states that it is on the increase. An area of 8,080 acres at the Hit-or-Miss Farm in the



Bore at Camden Park.

Barcaldine District is irrigated for grazing purposes, apparently without tillage and for the sustenance of the native grasses. The situation is just under the Tropic of Capricorn. About  $4\frac{1}{2}$  degrees further south, but about equally distant from the coast, an area of 145,000 acres has been chosen for an experiment in irrigation of natural grasses by gravitation from a central artesian bore. The situation for a bore having been fixed, it was put down to a depth of 2,081 feet, and yields a flow of 2,061,900 gallons daily of water of exceptional purity. Not far off two other bores have been put down by private enterprise, each flowing at the rate of 2,000,000 gallons per day. The total area irrigated in Queensland, including a trifle of 164 acres by gravitation from running streams and some 7,500 acres by water pumped, amounts only to 16,000 acres. This contrasts lamentably with the accomplishments of the French in Algeria, who have converted into fruitful fields no less than twelve million acres in the Sahara. But possibly the snowy summits of the greater Atlas range furnish in that part of the world absorptive areas of great extent, while the annual melting of the snows must, as a matter of course, provide constantly renewed and inexhaustible supplies of water for the strata to imbibe.



The total bores in Queensland, catalogued by the Water Supply Department, number, in 1898, 715. Of these, 68 were incomplete or unclassified. Of the balance, 647, there were 430 overflowing, 9 sub-artesian flows at sites where the water will not rise to the mean surface, 69 sub-artesian flows pumped more or less regularly, 39 good sub-artesian flows not at present utilized, and 100 abandoned bores, failures or defective.

It is estimated that the aggregate of the borings in search of artesian water in Queensland is equal to over 159 miles. Thus, were Pelion piled on Ossa, such a bore would not only penetrate both, but project, like the tunnel mentioned by Mark Twain, into the air. If hills upon hills, and Alps o'er Alps arose; nay, if the highest peaks in the Himalayas were heaped on one another till thirty of the loftiest made the stupendous tower, a single bore equal to the aggregate of all the artesian wells sunk in Queensland, commencing on the topmost pinnacle, would perforate them all.

It is easy to conceive in a general way the natural magic which can be exercised by the irrigation of suitable soil, when climatic conditions are favourable. Even the sandy wastes of the Sahara have been, as already mentioned, coaxed by this means to yield crops and nourish fruit trees. How much more, therefore, may be expected from the seasonable application of water to the rich soil of the Western prairies of Queensland, which in a state of nature bears ample herbage of nutritious grasses, famous already under their names of "Mitchell" and "Blue" grasses. Record of our actual experience will, however, serve better than a hundred theoretic or imaginative suggestions to impress the mind.

Mr. W. H. Campbell, of Jaccondol Grazing Farm, Barcaldine, furnished in the beginning of 1898 some interesting particulars, which were published in the *Queensland Agricultural Journal*. First there is given a brief statement of two separate attempts at wheat-growing without irrigation. Says Mr. Campbell:—

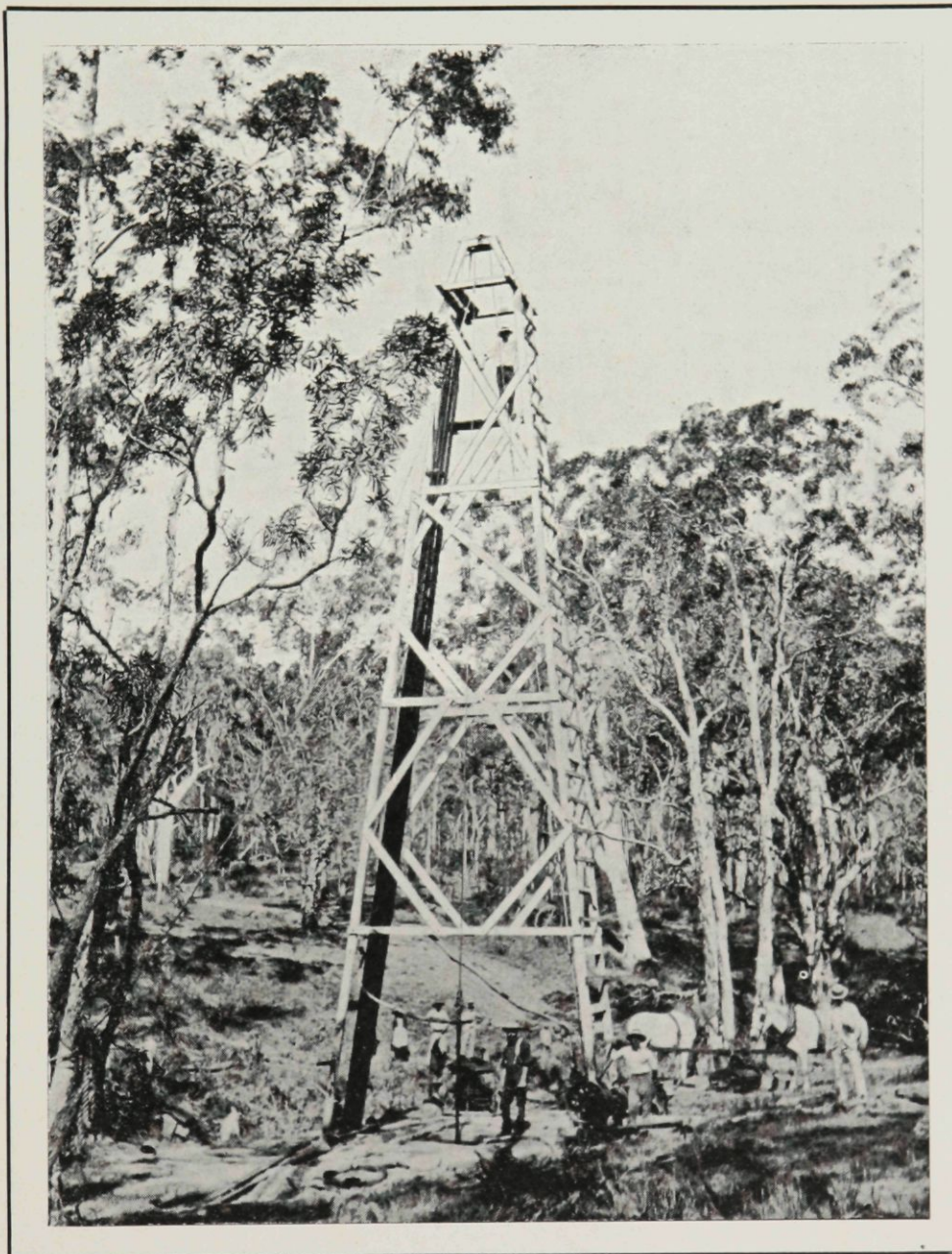
"The first experimental plot of wheat at Barcaldine was sown by Professor Shelton, in July, 1895. The site chosen was two acres of the chocolate soil on the plain country. This was fenced in and planted with thirty-two different varieties of wheat under Mr. Shelton's supervision. The seed germinated, but no rain fell during the months of August and September, and the plants withered up and died. On the same spot I sowed two acres of Allora Spring Wheat in June, 1896. This germinated, but, owing to protracted dry winter and spring, it did not flourish, and ultimately it was destroyed, just after

coming into ear, by marsupials and parrots. The same year I prepared an acre of ground adjacent to the bore stream, close to the homestead on Jaccondol Grazing Farm, and this was sown with the remainder of the seed supplied by the Department of Agriculture. This yielded 16 bushels of good sound wheat. This year I ploughed up fourteen acres of downs country adjacent to the bore stream. Eight acres were sown with wheat, and the remainder with oats for hay. . . . I intended to sow the wheat in May, but no rain coming I postponed the sowing till the 8th June, when I irrigated the field and the seed germinated. The method of irrigation was by plough furrows from the main drain. On a portion of the field the furrows were 21 yards apart and the surface was saturated by the overflow. On the remainder

of the field the furrows were made 5 feet apart, and the ground was irrigated by soakage through the subsoil. Shortly after the seed germinated the young plants were helped forward by a fall of over 2 inches of rain. No more artificial moisture was applied until the wheat was coming into ear, when the ground was again thoroughly saturated. The rapidity of the growth of the wheat rather astonished me, as it was quite ripe the second week in October, before the hot weather set in. I kept the best of the crop for grain, reaping 5½ acres. The remainder was cut for hay, the method of harvesting by hand reaping and threshing with a flail being too expensive. Competent laborers cannot be obtained under 30s. a week and found, and the harvesting of this small field of grain cost £2 10s. per acre. The yield was 29 bags. A portion of the field measured off for the purpose yielded 25 bushels per acre, and a small portion, where an extra application of water had been tried, gave nearly 30 bushels to the acre. The cost of irrigating is trifling, provided the water is available for other purposes. The bore on my grazing farm cost £700, but since that was put down the price of boring has de-

creased, so that a farmer, for the expenditure of £500 in cash, can have an artesian well of any depth down to 1,200 feet, cased from top to bottom, and available for immediate use. The drains are simply made with tank-plough and delver, and the irrigation furrows with ordinary plough. One man with a long-handled shovel directs the water into the furrows till the whole field is saturated. A bore with a flow of 500,000 gallons per day should be sufficient to irrigate from 300 to 400 acres."

In Queensland, according to the latest official records available, which is up to the middle of 1899, there have been sunk 647 completed bores; 45 others were in progress, and 23 were known to exist, but could not be classified for lack of details. There were 50 bores



Boring by Horse-power.



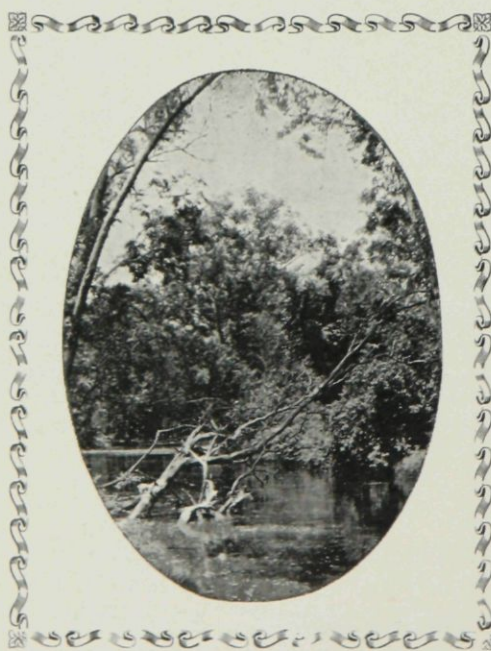
exceeding 3,000 feet deep, of which the deepest, at Bimerah Run, west of Blackall Township, is the deepest, although very far from the most copious. Its depth is 4,860 feet, its flow only 19,320 gallons per day. There are sixteen bores, chiefly in the Maranoa District, which pour out from three millions to four millions gallons daily when uncontrolled. All Government bores, however, are furnished with valves at the pipe outlets, and waste from private bores is steadily deprecated. Special legislation would be needed, however, to enforce economy in the use of bore water. The total continuous yield from 440 bores, at which the flow is known or estimated, amounts to over 266 millions of gallons per day, giving an average of 45,366 gallons per bore per day. The average depth per bore is 1,179 feet nearly.

These figures are in strong contrast with those available to us relating to artesian wells in Algeria. Of 320 bores, executed under Government supervision, in the Sahara regions, the average depth is but 787 feet, and the average flow 331,000 gallons per day.

The trend of opinion being that it would be vain to look to artesian waters for a supply adequate to convert by irrigation the often drought-ravaged rolling-downs country of Queensland into a blooming region of perennial fertility, some alternative has to be sought for. An idea is germinating that the desired object may possibly be attainable by combining with the supplies of water procurable by a judiciously calculated maximum of artesian borings, comprehensive conservation of the rainfall, which, when it occurs, is often excessive.

We have not, in Queensland, relics of a former civilisation to suggest how a traditional fecundity can be restored to tracts now desolate. But the student may turn, with profit, to records of other

parts of the globe where the physical conditions are similar, and antiquity has left traces fraught with lessons of value. Thus, reverting to Algerian precedents, we find in the report by M. Jus on the Province of Constantine, a passage so germane to our subject that no apology is needed for introducing a quotation. "In the basin of the Hodna, for example, a moderate temperature, a healthy climate, enable Europeans to live, and history teaches us that, under the Roman rule, and even for some centuries after the conquest of this country by the Arabs, the portion of Africa to which we are giving our attention was remarkable for its fertility and for the diversity of the cultivation undertaken there. In the upper part of the basin breadstuffs were cultivated with success, whereas in the other parts which are near the Chatt (bottom of the basin) cotton, date, and fruit trees of all kinds covered the soil. When colonization shall have taken possession of this country, the Europeans will be able, as formerly, to devote themselves to the cultivations now abandoned. Cotton, sorghum, date palms, and even sugar cane will become for our colonists sources of prosperity. What is necessary to secure this result? It is necessary to do as our predecessors did: re-establish those hydraulic works of which one sees everywhere the traces. In the higher part of the Hodna we must repair the reservoirs which the Romans had made, and in which they stored the waters during the rainy season, in order to make them serve for irrigation during the summer. In the middle portion of the water courses, reconstruct the dams, the canals which carry vitality to every part; and, finally, in the lower parts of the basin make use of the artesian bore, the cause already of so many miracles in the Ouad Rir, and which has been so successful in the three attempts we have made in the Hodna."







**A**LTHOUGH, as will be gathered by a complete perusal of this sketch, Queensland has been, and still is, steadily and even rapidly emerging from the primitive stage of a mere pastoral country, the grazing industry still continues, in point of production for export, distinctly predominant. More than half the exported commodities are products of that utilization of the natural grasses. Although for several years past increase in the quantities of cattle, sheep, and horses,

previously very rapid, has not been sustained, this does not necessarily indicate that the maximum possibilities of the territory have been attained. The halt, even slight retrogression, has been due to a concurrence of at least two causes, each of separate character, and each in some degree transient. The first was the appearance of a plague of ticks, a trouble hitherto unknown in Australia, which attacked horned cattle, and in a less degree horses. These insects swarmed upon the afflicted beasts, infected them with or worried them into a violent fever,



Cattle at Water—Near Esk, Upper Brisbane River.



with peculiar symptoms, which carried off a grievously heavy proportion of the animals affected, and prejudicially lowered for a couple of seasons the fecundity of female cattle which survived. This plague of insects had effected serious ravages among the herds before any method of remedy or any preventive device could be hit upon. But although the trouble has greatly abated, and appears to be dwindling to extinction, it is doubtful whether this is attributable more to the recourse to dipping herds in troughs, specially constructed, of a special insecticide, to inoculation with a special microbe culture, or to a gradual setting up of an inherited immunity in stock the progeny of animals once afflicted, or, finally, to the gradual extinction of the insect by the operation of some law of periodicity. Whatever the reason, the tick plague has lost

its terrors, and seems to be passing into the limbo of almost forgotten inflictions of a similar nature, such, for instance, as the scab in sheep, which, late in the fifties, brought many squatters to, or thrust them over, the brink of ruin, yet has never since been a serious trouble.

The other chief cause of the suspension of increase in grazing stock has been a very long protracted and almost unrelieved drought, which has absolutely ravaged the beautiful downs and plains of the interior—that is to say, the Western country—of Queensland and of New South Wales. There have been severe droughts before, inflicting heavy losses on squatters in the far west, and converting progress into retrogression, [as] regards the numbers of sheep, which, during

the period covering the years 1877 to 1880, had so dwindled that in that year they were fewer than in 1870 by about 2½ millions. Again, in 1884-5, there was a recurrence of drought and of losses. But when one reviews the course of the industry comprehensively, it will be seen that, despite occasional back-flows of the waves, the tide of progress has always been rising.

As early as 1824, when the valley of the Brisbane was the only portion of Queensland occupied, and that only as far up as Ipswich, on its tributary the Bremer, there were some flocks and herds belonging to the penal establishment at Brisbane, but apparently grazed around Limestone, as Ipswich was then named. The nuclei of these flocks and herds must necessarily have been brought from Sydney

by sea, in the little coasting vessels of the period, and consequently their numbers cannot have been large. Less than 20 years later, when the establishment was broken up and the prisoners withdrawn, the increase from such beginnings had been sufficient not only to supply the fifteen hundred or two thousand people with meat, but to create a surplus amounting to 900 head of cattle and 4,500 sheep. Four years later the stock left under the charge of Mr. John Kent, progenitor of one of the best known squatting families in Queensland, had increased to 1,620 cattle and 12,000 sheep, the wool of which, sold at one shilling per lb., fetched £1,000. By this time the Darling Downs had been invaded by overlanders and stations established. In 1844 it is ascertainable from a sketch map of the period that there were in the



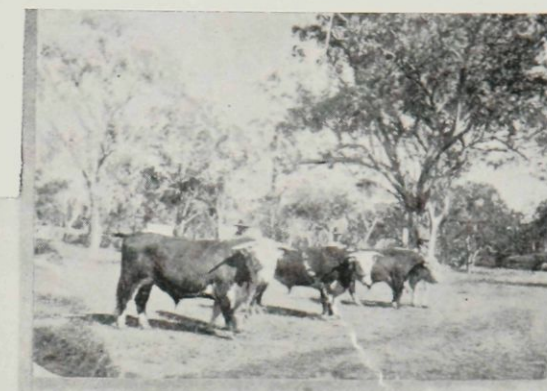
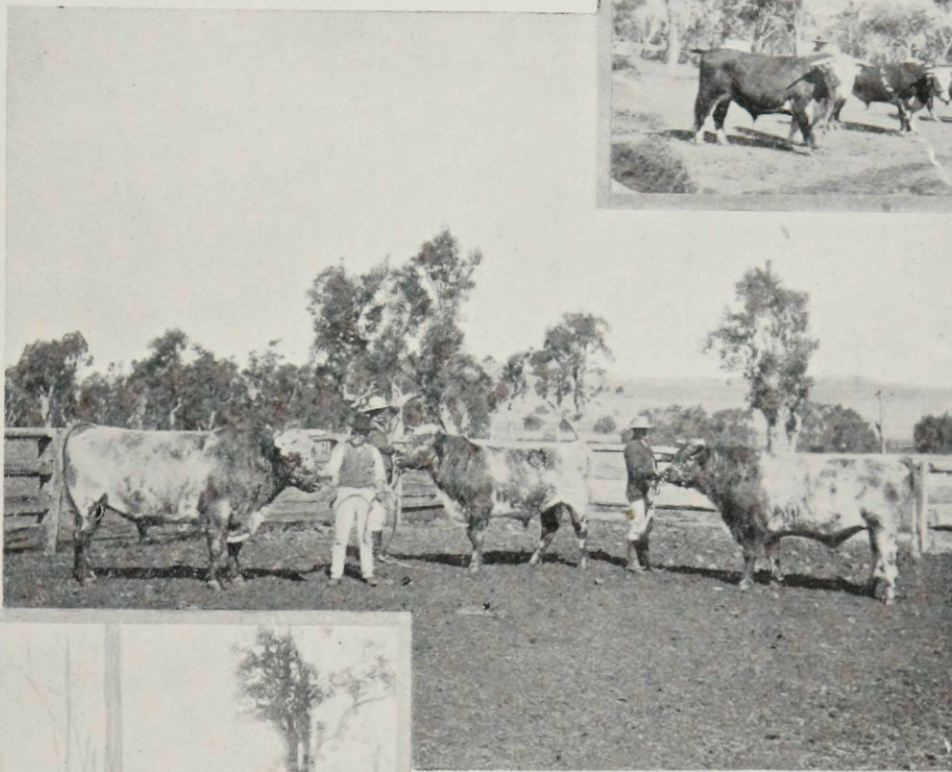
Glengallan Station Cattle, Darling Downs.

Moreton Bay district seventeen stations, carrying 215 horses, 4,028 head of cattle, and 74,420 sheep. On the Darling Downs were twenty-six stations, with 445 horses, 9,267 cattle, and 110,231 sheep. Official statistics, however, began to be published in 1860, shortly after separation of Queensland from New South Wales, and from these the following table, indicating the increase of stock, is compiled:—

Year.	Horses.	Cattle.	Sheep.
1860 ... ..	23,504	432,890	3,166,802
1870 ... ..	83,358	over 1 million	over 8 millions
1880 ... ..	179,152	3,162,752	5½ millions
1890 ... ..	365,812	5,558,264	18 millions
1899 ... ..	479,127	5,053,836	15½ millions



In connection with these figures, however, allowance must be made for reduction in numbers by exportations of live stock for animals slaughtered for conversion into exportable commodities such as frozen and chilled meat, canned meat, beef extract, and so forth, and also for the quantities killed for local consumption. During the year 1899 there were exported in excess of importations 188,271 live cattle, and 262,753 live sheep. For exportation as frozen meat, etc., there were slaughtered 386,466 cattle and 479,818 sheep, and for local consumption 254,482 cattle and 1,017,728 sheep. Such disposal of stock modifies the former figures to the effect that, allowing for losses from drought and other abnormal causes, there was still an increase in cattle for the year of 311,713, while the net loss of sheep was reduced to 565,830. The losses in sheep during the present drought have after all only slightly exceeded in number those during the dry years between 1870 and 1880, and the percentage of loss has been comparatively trifling. From 1870 to 1880  $2\frac{1}{2}$  millions sheep were lost out of little over 8 millions, being over 31 per cent. From 1890 to 1899 the diminution was about  $2\frac{3}{4}$  millions from 18 millions, and the percentage consequently little more than fifteen. Moreover, during the earlier period, little had to be allowed for exportation, whereas at the present time forty-seven establish-



STUD CATTLE.

It is, therefore, not unreasonable to conjecture that in this respect history may repeat itself, and that in Queensland, reversing the ancient instance of Egypt in Joseph's time, the seven lean years may be succeeded by seven years of fatness.

It is not loss of stock alone which harasses the squatter of the Western country in years of drought. He is subjected to endless worries besides. His ordinary means of transit and communication are rendered unavailable. Situate perhaps hundreds of miles from the nearest railway station, his supplies of stores and so forth have been

conveyed to him, and his output of wool sent away by the old Australian convenience of bullock waggons or horse teams. Grass along the route is an absolute necessity for bullocks; and

although teamsters sustain their horses with corn and chaff, they count upon the natural grasses for a fill-up. Besides, there is the question of water at regular stages. Traffic of all kinds is impeded most seriously; of some kinds it is brought to a standstill. Hence has arisen the necessity for the introduction of camels, the only beasts of burden which are unaffected by droughty conditions, and which by their ability to carry on packs loads of from 4 cwt. upward are found of vast utility.

The squatters of Western Queensland are not, however, to be regarded as satisfied by reverting to the means of transport which prevailed in the days of Abraham and Lot. Although the camel caravan has been resorted to as one expedient for supplementing, in periods of drought, the bullock waggon and horse-team, modern science has also been invoked. Traction engines are utilised to drag across the plains, from railway station to the squattages, trains of heavily laden waggons, and at least one experiment has been initiated with a view to the introduction, for transit purposes, of that most recent of inventions, the auto-motor car.

The patriarchal system of grazing flocks and herds in a nomadic fashion, unconfined over whole territories—guarded by horsemen, or tended by shepherds, who “watch their flocks by night”—has been abandoned. Little more than 30 years ago there were scarcely any enclosed paddocks in all Queensland, except at head-stations, where a few hundred acres commonly were enclosed to keep the working horses at hand for daily use. One might then have ridden from the ocean to the centre of Australia, through Queensland territory, without dismounting to open a gate or remove a rail. But since then the

ments are in existence in Queensland, and were in active operation during 1899 for slaughter of stock and preparation of the carcasses for exportation. Of these, thirteen are meatworks, and twenty-five, including those chiefly preparing extract of meat, rank as boiling-down establishments. In addition, but not affecting the subject under consideration, there are nine factories for bacon-curing.

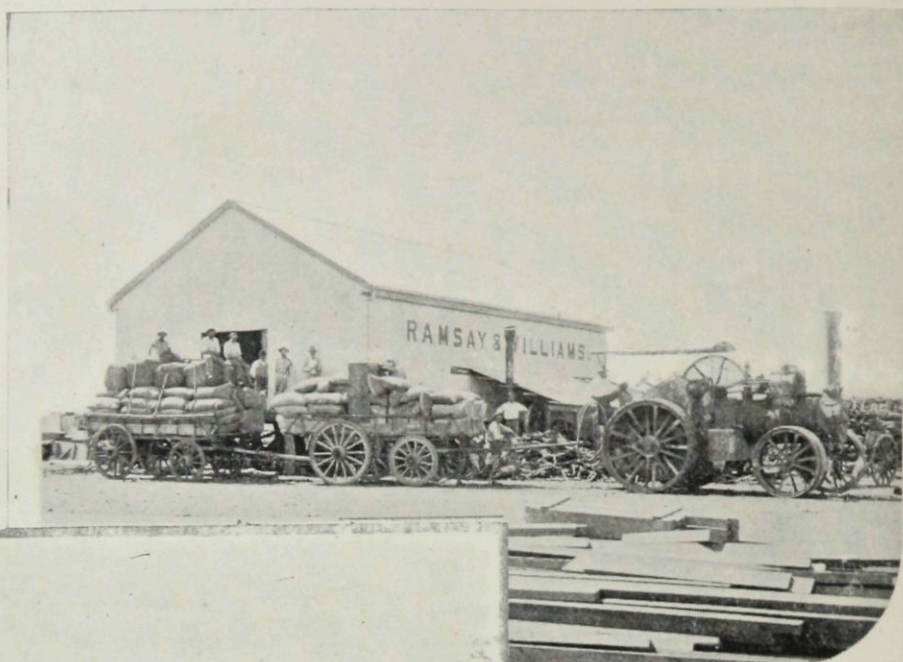
It may be seen, on further reference to the table just given, that on previous occasions the colony has proved its possession of extraordinary recuperative energies in relation to losses by drought. It will be seen that between 1870 and 1880 the sheep in the colony were reduced from over 8 millions to  $5\frac{1}{2}$  millions, and that for the year 1890, despite another severe pinch of drought in 1884-5, not only had that loss been made up for, but the number of sheep had bounded up to 18 millions.



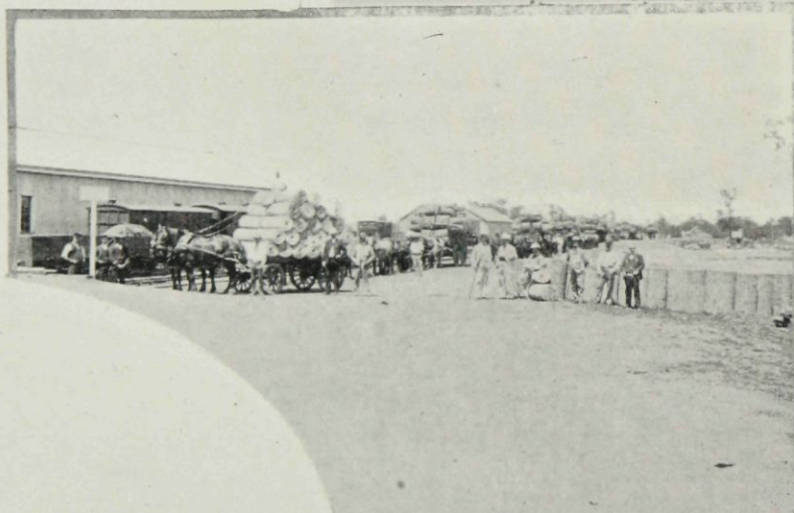


whole country has been parcelled into paddocks of posts and rails, made of split lengths of tree trunks in the Eastern forest regions, but almost exclusively of wire—plain, barbed, and netted, according to circumstances—on the open downs and prairie country west of the main range.

The erection of these fences furnished employment for hosts of men while the operation was in progress. At the present time the chief occupation for the bush-worker of the Western interior is provided by the great annual wool harvest, the shearing. The intermittent nature of this sort of demand for labour leaves the shearers, or a considerable proportion of them, without work to do during a good part of the year. Many of them fill up the time by methodical hunting of marsupials. The squatter has, at various times, by waging successful war by organised and constant poisoning of the native dogs, or dingos, found the kangaroo and wallaby multiply to an extent which rendered them worse than



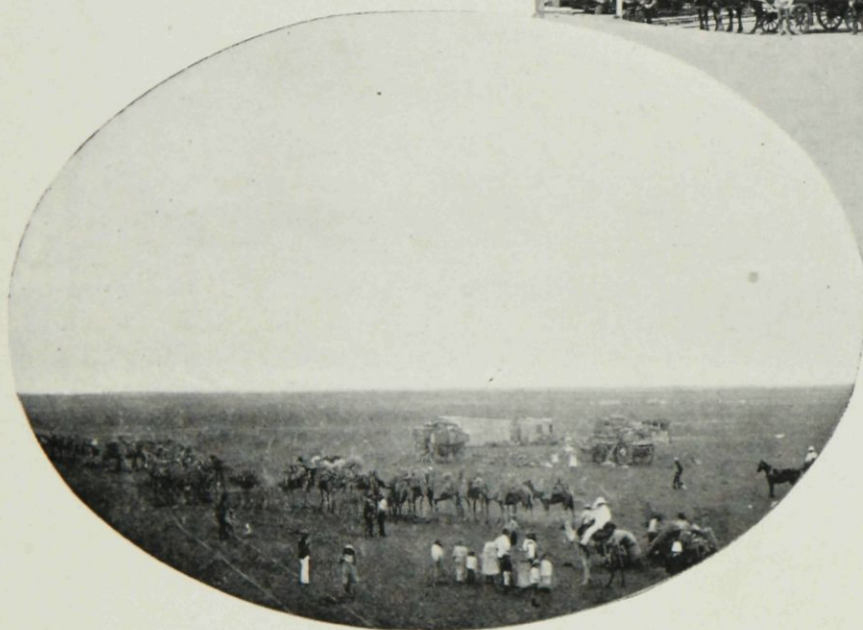
BY TRACTION ENGINE.



BY HORSE TEAM.

than that which is shorn in the north-western portion of her expanse, and Australian wool sets the standard of excellence and is eagerly sought not merely by manufacturers of fabrics in Great Britain, but by their rivals in France, Germany, Austria, and the United States of America.

When the Darling Downs were first occupied and an exodus of stock from New South Wales set in, not merely to graze on the juicy and varied herbage of that remarkable tract, but, traversing it, to overrun the forest lands of the Moreton, Burnett, and Wide Bay districts, there were Quidnuncs who insisted that, forced thus to semi-tropical latitudes, the sheep would undergo a physical change, and modify their fleece to suit the prevailing temperature. The reasoning upon which that foreboding was founded appears sound, even now that results have falsified the prediction.



BY CAMEL CARAVAN.

### CONVEYANCE IN THE WEST.

a nuisance. The almost extirpation of their natural enemy removed the one important check to an overwhelming increase of marsupial population. Hence enactments were placed on the statute-book facilitating local combinations to raise by district taxation, supplemented by pro rata grants from the Treasury, funds wherewith to pay a price for every marsupial destroyed. The required proof was the production of the scalp of the victim. Parties of men, during the slack season, make a business of kangaroo shooting, and, by choosing and changing the scene of their sport, find it pay pretty well, as the skins are marketable commodities.

Respecting the quality of the wool produced from Queensland flocks it is unnecessary to say much. Australia offers to the world none better



Kangaroo Scalpers' Camp.



Indeed the inductions have been rendered impregnable by the exposition of the law of development established by Darwin, who at that time had not even begun, as Naturalist on board H. M. S. Challenger, off the coast of Australia, those observations which germinated in his mind the reflections subsequently worked into a comprehensive system. That sheep forced to adopt a semi-tropical and indeed a tropical region for their habitat would, in course of time, carry a lighter and ultimately even, as predicted, a hairy coat can now scarcely be doubted. But since that warning was uttered, flocks have in Queensland been pushed further and yet furthest North, even to the shores of the Gulf of Carpentaria, yet no deterioration in the quality of their wool has ensued. On the contrary, there has been a steady improvement. This contravention of apparently dominant natural laws has been due to an intelligent process of qualifying the influence of one set of laws by that of another set. On the Darling Downs plateau indeed the winter cold is sufficient perhaps to counteract the ardors of the summer sun. But even there, and in all parts of Queensland, infinite care has been taken, and is sustained, to counteract any possible deterioration of fleece by the constant introduction of fresh strains of constitution in stud sheep, imported from the colder regions of the world. It must be borne in mind, in connection with this subject, that the merino type of fine-woolled sheep was first perfected in Spain, not in any frigid country. It was from Spain that

the progenitors of the flocks which made Saxony famous were procured. It was from Spain—a present of rams and ewes by the King of that country to George III.—that the little flock kept at Kew, whence Macarthur was favoured with a draft of stud merinos, was derived.



WOOL—On the Way to Port.



On the Sheep's Back.

It was also from the Royal Spanish flock that the flocks at the Cape of Good Hope, whence Lieut. Kent and others in the earliest days of N. S. Wales procured the sheep which Macarthur started with, had been improved. In short, the Merino is a sheep of Spanish origin, and finds in Queensland a habitat not unlike—climatically unlike—its first home. Any tendency to deteriorate is repressed by constant introduction of fresh blood.



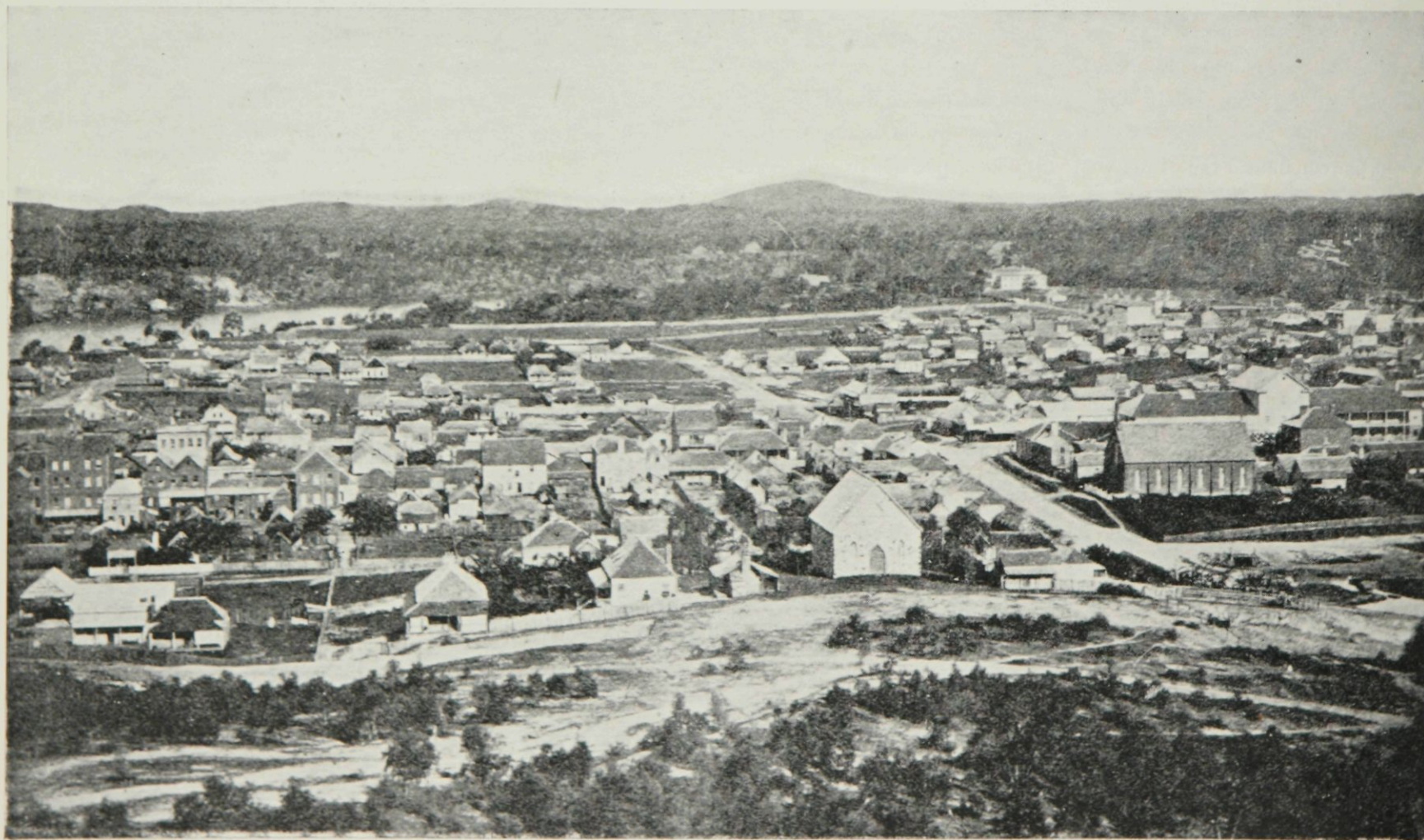


# The City of BRISBANE



**THE** city of Brisbane, metropolis of Queensland, occupies a site which, with many things to recommend it, has also serious drawbacks. Originally selected as a spot suitable for a penal establishment, there was sufficient space for such a purpose on ground amply elevated, and with natural drainage. What above all governed the choice, however, was beyond doubt a convenient supply

of drinking water close at hand. The first penal settlement on the shore of Moreton Bay at Redcliffe Point had to be abandoned after a few years' occupancy, because the waterholes there were found to dry up during droughty seasons. There are several places on both banks of the Brisbane River nearer to its mouth than the site of the present city, which possess, in a high degree, every attraction



Brisbane from The Observatory, 1862.

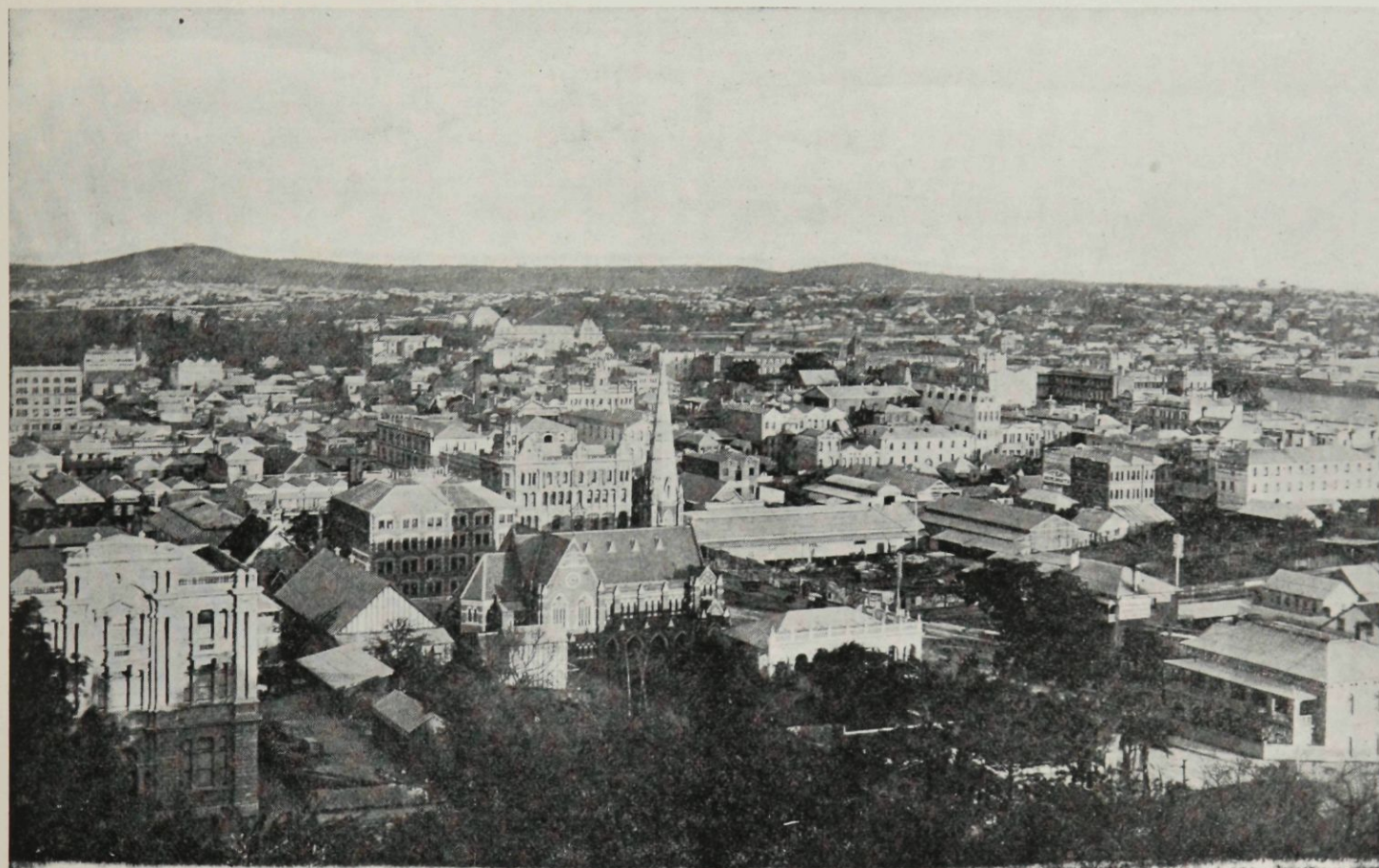


offered by the actual site except a handy water supply. The visitor of to-day would indeed look in vain for any trace of such a convenience in the enciente of Brisbane. But it is only lately that the last traces of the original pools have been obliterated. In a vale situated between the high bank of the river and the ridges which rise behind and make a salient angle where the Observatory looks down on the city, a gully existed. It is easy for any old resident of Brisbane, who has witnessed year after year the degradation of chains of bush water holes, as settlement has expanded the suburbs of Brisbane, to recreate in his own mind the appearance of this gully when first visited by Europeans. Hidden in the forest, partly shaded by the foliage, one little clay-bottomed pool succeeded another in a grassy depression. The liquid contents were limpid but slightly coloured

microbe called man; and to the presence of that water supply the creation of the city of Brisbane where it now stands is due.

For the purposes of the founders the site was well enough. There was ample space on the steep and high bank of the river for airy sites for the dwellings of officials and their administrative buildings. Just adjoining, a bend of the river enclosed a tract of alluvial soil clothed with dense scrub, a suitable place for the enforced industry of the convicts. Opposite, on the Southern bank, another and much more extensive area of similar land presented the same inducement. A broad-backed ridge ran at a right angle from the river bank, flanked on one side by the water-course already mentioned, and sloping on the other to a swampy depression, whence mosquitos swarmed, and whence proceeded nocturnally a dismal chorus of croakings, whence its scarcely yet forgotten name, Frog's Hollow.

True, the ridge terminated in a depression where the watercourse curved and soaked its way to the river. Creek street preserves its memory. From the balcony of the still existing premises of James Campbell and Sons, once the family residence, the younger generation, in the fifties, could drop their fishing lines into the creek. In times of floods, the river overflowed up this channel



Brisbane from The Observatory, 1898.

by the infusion of dead leaves and twigs swept into the ponds by the surface flushes which in rainy weather poured into and over them. The water was wholesome and palatable. In the sixties the overlooking ridges had been stripped of the forest. The chain of pools had disappeared. The course of the gully had been obstructed and deflected. A dam and excavated reservoir of turbid water still remained where the gully had been converted into a sheet of water for the supply of the settlement. The site was near the intersection of George and Roma streets, and the short Tank street, leading from the river bank to the first mentioned thoroughfare, serves as a pointer to indicate the locality.

This gully, now almost obliterated, with its chain of pools, furnished the condition essential for the existence of that singular

and submerged the low land up the course of this creek. But for such an establishment as was contemplated that was a matter of no concern.

The nucleus of the present town consisted of a series of buildings facing the river—administrative offices and residences for commandant and officials. These were built of brick. Above and below the present Victoria Bridge they stood, and have gradually been replaced by modern structures. The Survey Office and the Supreme Court stand where the old hospital and another building existed. Where the fine pile of Treasury Buildings now stands, were the military barracks, and William street was the frontage line to a series of others.

Facing the ridge already referred to, the barracks for the male convicts were erected, and made a beginning for what is now the principal business street in the City, Queen Street. At a considerable distance beyond the gully or creek was a knoll, upon which was erected





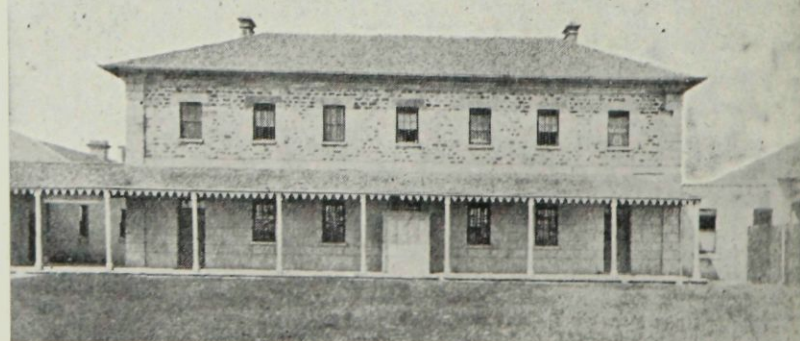
Treasury, Brisbane.

a barracks for female prisoners. All these antique structures were continued for public uses after the happy abandonment in 1840 of Brisbane as a penal settlement. When the Colony of Queensland was separated from New South Wales, under a Constitution of its own, the Military barracks were still in their pristine use, a detachment of H.M. Infantry being stationed there. But later, on the withdrawal of the British troops from Australia, the barracks were turned to account for offices for the Treasurer's Department and Audit Office. From these beginnings has the present town developed. The first private residence in Brisbane, built for his own use by one Captain Coley, a seafaring man, after Separation, a member of the legislature, still stands, and we give an illustration of its present appearance. Hidden as it mostly is, under a rich robe of creepers, and with its original

arteries to widths which would have exceeded the extent of the latter.

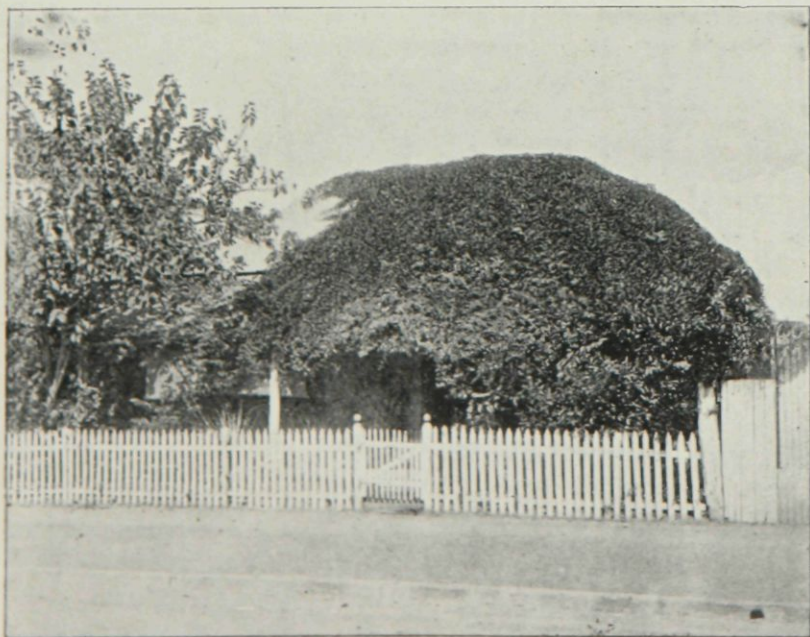


The area comprised in the first survey is plainly indicated by the names of the streets then defined. The main avenue received

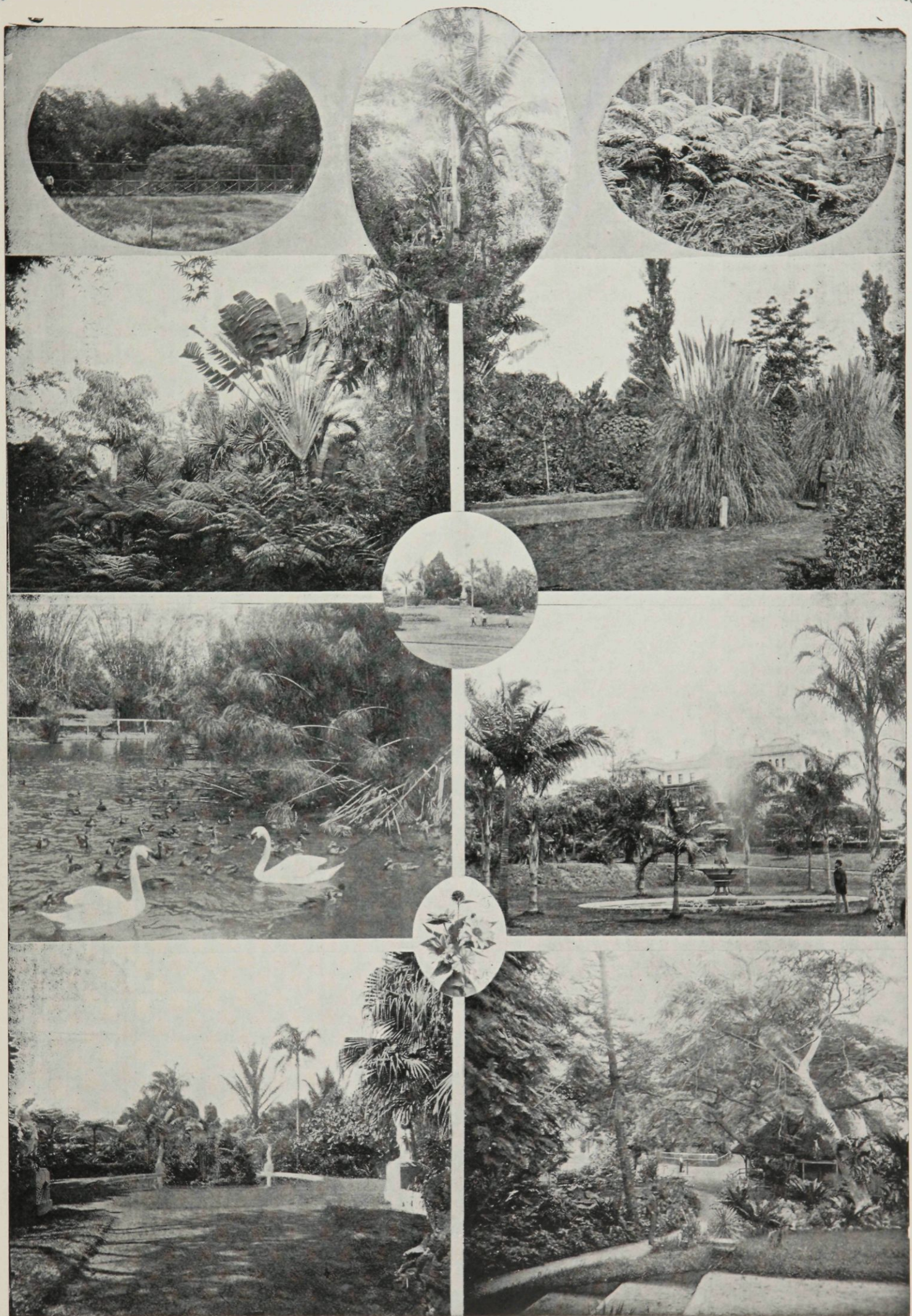


Old Military Barracks, Brisbane.

the title of the reigning sovereign, as Queen street, and parallel with it the names of earlier British female Royalties were conferred. Anne, Adelaide, Elizabeth, Charlotte, Mary, Margaret, and Alice are thus kept from oblivion. The cross streets borrow designations from male princes. William, George, Albert, and Edward succeed each other. This indiscriminating loyalty of a Viceroy, equally adulating the houses of Anjou, of Tudor, of Stuart, and of Coburg, butts up suddenly against

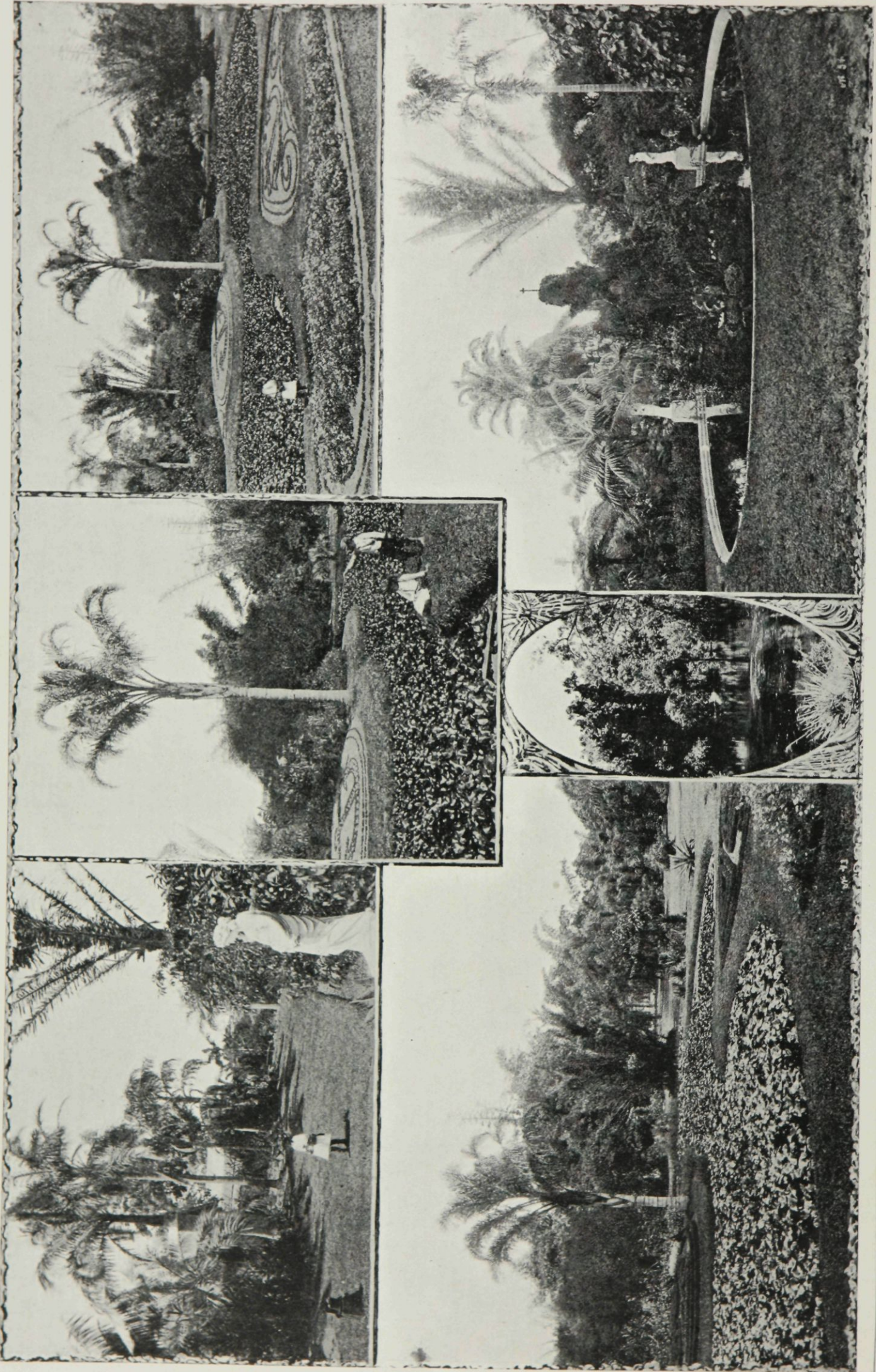






Views in the Botanic Gardens, Brisbane.





Gardens of the Acclimatisation Society, Brisbane.

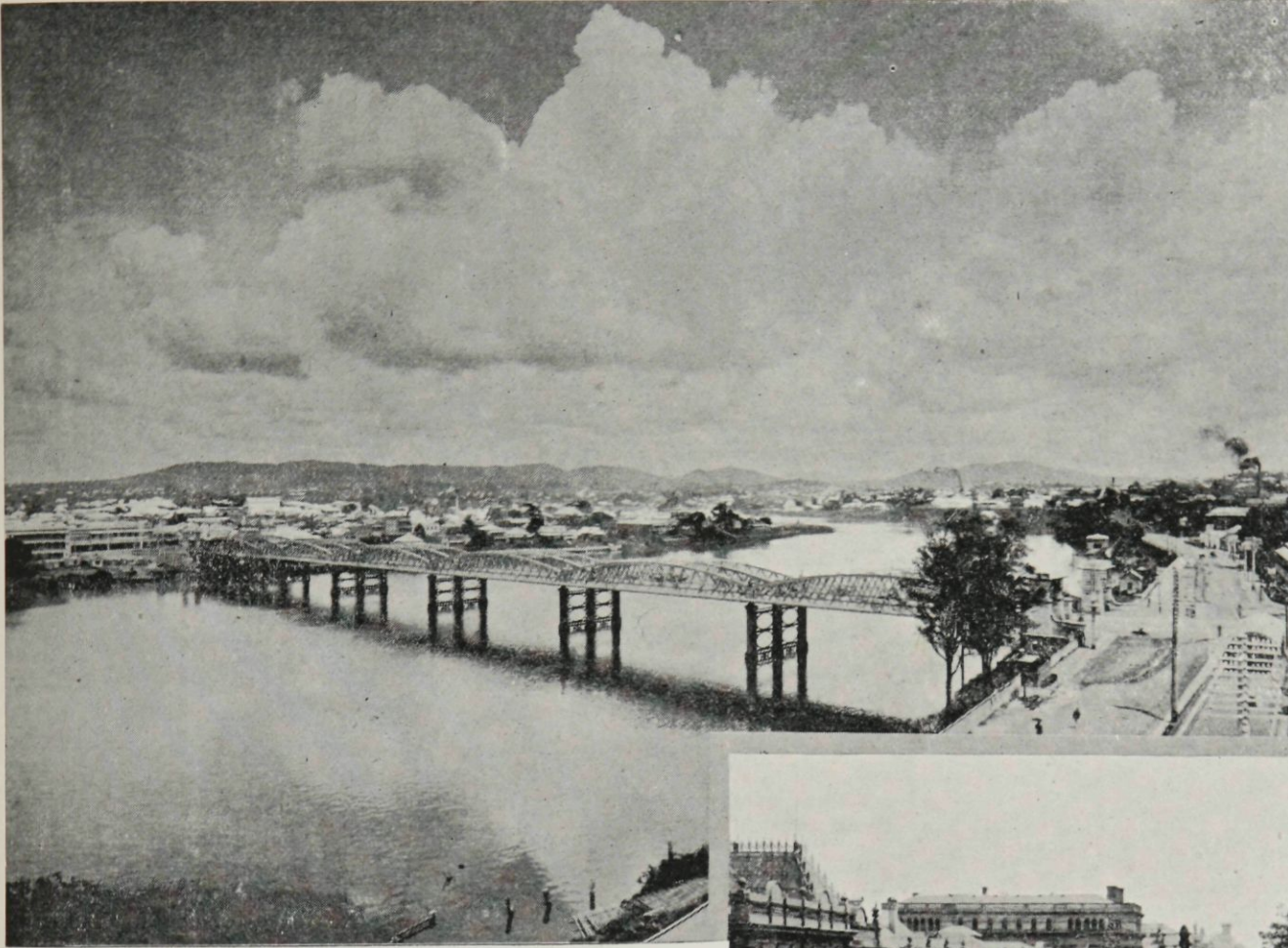


the utilitarian sense of the settler. The procession of male Sovereigns falls suddenly into Creek street, and that of queens and princesses condescends to a Turbot and a Tank. The growth of Brisbane, at first sadly slow, was vastly quickened when, by the separation of Queensland from New South Wales, it became a metropolis. It was, however, long before Separation that the first land sale took place in 1842. The

River submerge them to depths of many feet, this applies merely to an area very limited, when regarded comparatively. Should Brisbane continue to grow, as there seems reason to believe it will, its present main streets will doubtless hereafter be secondary to new and grander boulevards back from the water frontage and beyond the reach of all floods. The entire area of the business portion of Brisbane on the

north side of the river occupies less space than the "down town" congeries of mean streets which constitute the older portion of New York. The crests of the ridges which look down on the present city, and are yet chiefly occupied by residential buildings, offer attractions for the future expansion of shops, offices, banking and other business establishments, which leave nothing to be desired. Meanwhile the business people of Brisbane have good fortune in its suburban attractions for domestic enjoyment.

Back from the river and one or two small affluents, the country rises into undulating ridges, furnishing ideal sites along their crests for breezy avenues. Further back, mile after mile, undulations continue, becoming studded increasingly with the cottages and villas of the people whose daily work is in Brisbane itself, and gradually merging into regions of small farms and market gardens, towards the North, along the line of what, for lack of general antiquity, is styled the "old" Gympie road.



Victoria Bridge.

function was at Sydney--the influence of the speculator prevailing, as was usual at that time, over the convenience of the residents. The upset price was £100 per acre, and at that rate allotments aggregating 13 acres were sold, realising £4,637. The expansion of towns in countries newly colonized, or in the neighbourhood of newly discovered mineral wealth, has been so universal during the nineteenth century that it has ceased to be a topic of special interest. In 1845, that is to say five or six years after the convict establishment had been broken up, and consequently the whole territory completely purged of that objectionable nucleus of a population, never, happily to be reinflited upon it, there were 812 residents in Brisbane. To-day, in the last year of the nineteenth century, the estimated population within a five-mile radius of a central spot in the City of Brisbane is over 110,000 souls.

Although the extension of the town from the high site of the original Government buildings has carried some of the business portions into depressions where the periodic floodings of the Brisbane



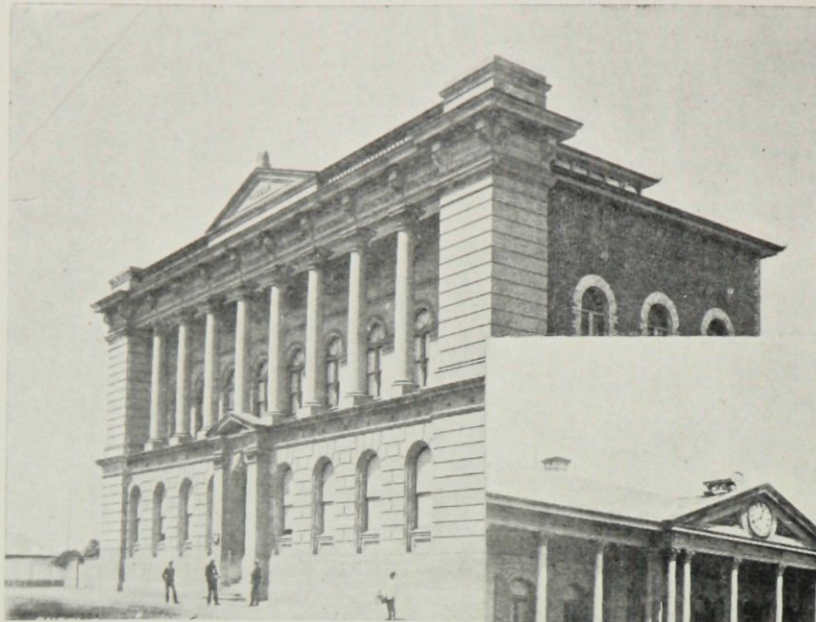
Queen Street, Brisbane.

South Brisbane, accessible by the fine steel bridge which leads direct from the end of Queen street, is unfortunate as a business suburb, but admirable as one for residence. Along the river frontage its alluvial flatness is subject to submergence by every considerable flooding of the stream. But further back rise the shaly ridges of what is known, geologically, as the Gympie formation, streaked with veins of quartz, and from these ridges rows of cottage homes, and here and there villas, each in its own plot of garden ground, small and large, court the



breezes, and from cool verandahs afford views overlooking river and town. The river, widely curving, sweeps round and leaves the back of these ridges where loftiest, again to stretch in a long reach westerly. The view from those elevations extends over its valley far away to the distant blue peaks of the main ranges, surpassing in natural beauty the famed prospect up the Thames Valley from Richmond Hill. Another important suburb, on the north side, is Fortitude Valley, which derives its name from having been the spot where the immigrant passengers by the ship Fortitude

encamped on their arrival in January, 1849, and which is now closely populated by chiefly the working classes, and beyond which, on the ridge to the westward, elevated sites have been found for the public hospital and for an Exhibition building



The Museum, Brisbane.



The Post Office, Brisbane.

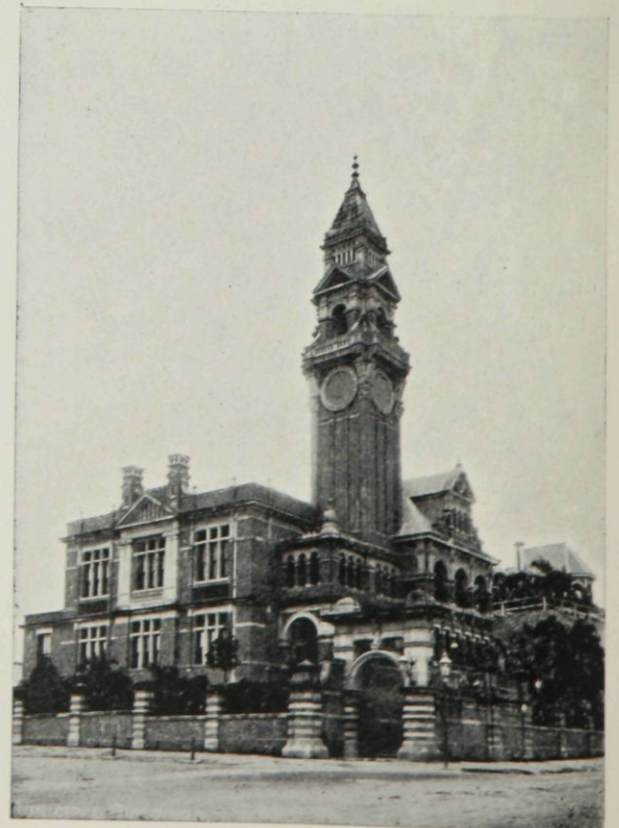
and enclosure, where annual shows of agricultural, pastoral, and manufactured products are held, while in the main hall a fine organ has been erected, and musical fêtes, balls, and other social gatherings are celebrated. Close at hand, where once brickmakers excavated for clay in a gully, by the prescience and energy of a handful of gentlemen of taste, the rude pits have long been converted into ponds embellished by native water-



The Technical College, South Brisbane.



Custom House, Brisbane.

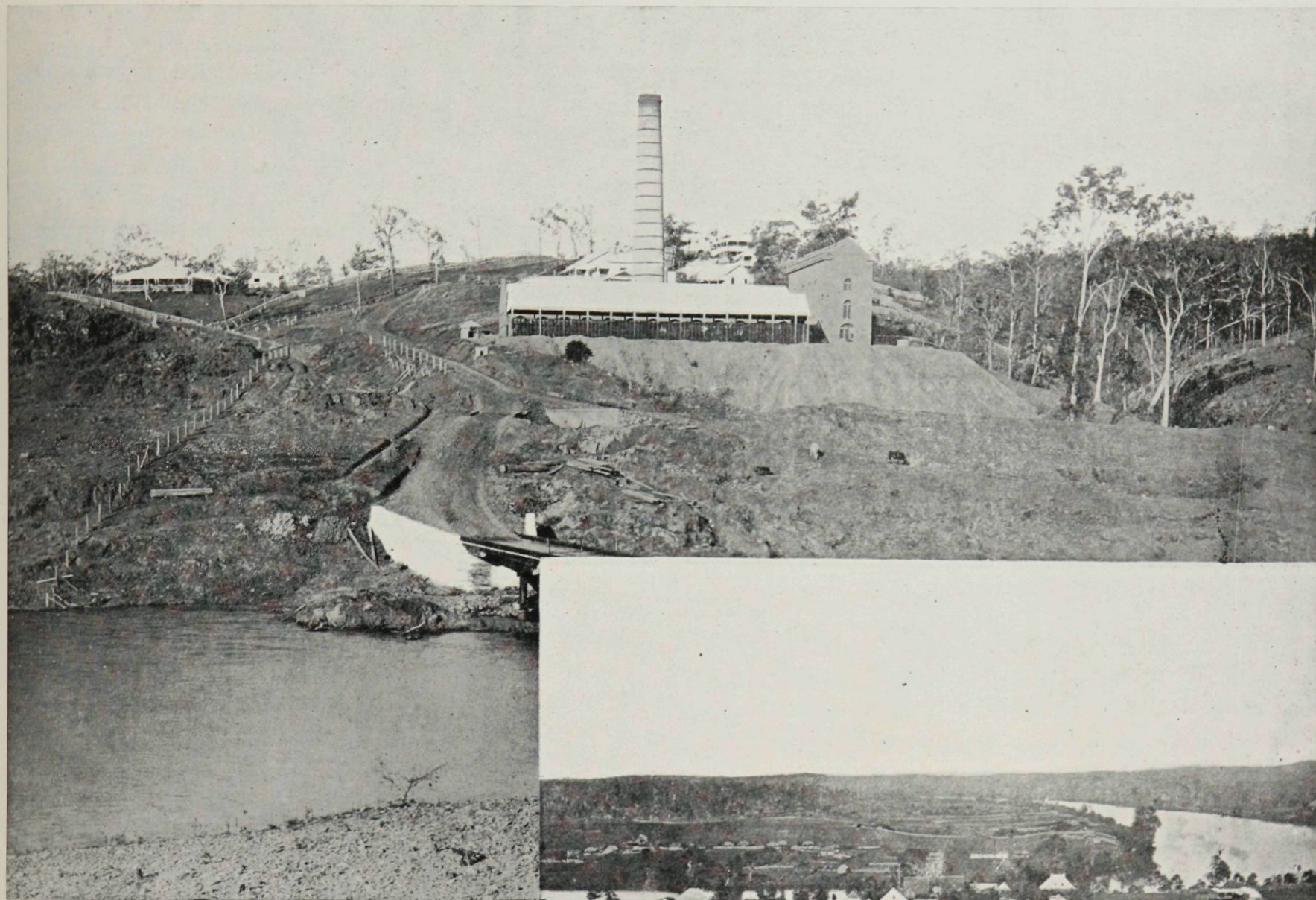


Council Chambers, South Brisbane.



lilies and other aquatic plants, made to be, if not precisely "haunts of coot and tern," the recreation resort of black swans and other water fowl indigenous and imported. The surroundings have been beautified by skilful landscape gardening, and these Acclimatization Society's Gardens, with their pretty lawns and groves of arborage from all parts of the world, rank high among the beauty spots of Brisbane, second only

The old reservoir, long since filled in and built over, had for immediate successor a great dam, creating a lake out among the spurs and gullies of Taylor's Range, at Enoggera, whence the pellucid waters, bordered with aquatic lilies, are conducted by pipes to supply the town. But with the extension of population even this provision proved inadequate, and on the banks of the Brisbane River, above the

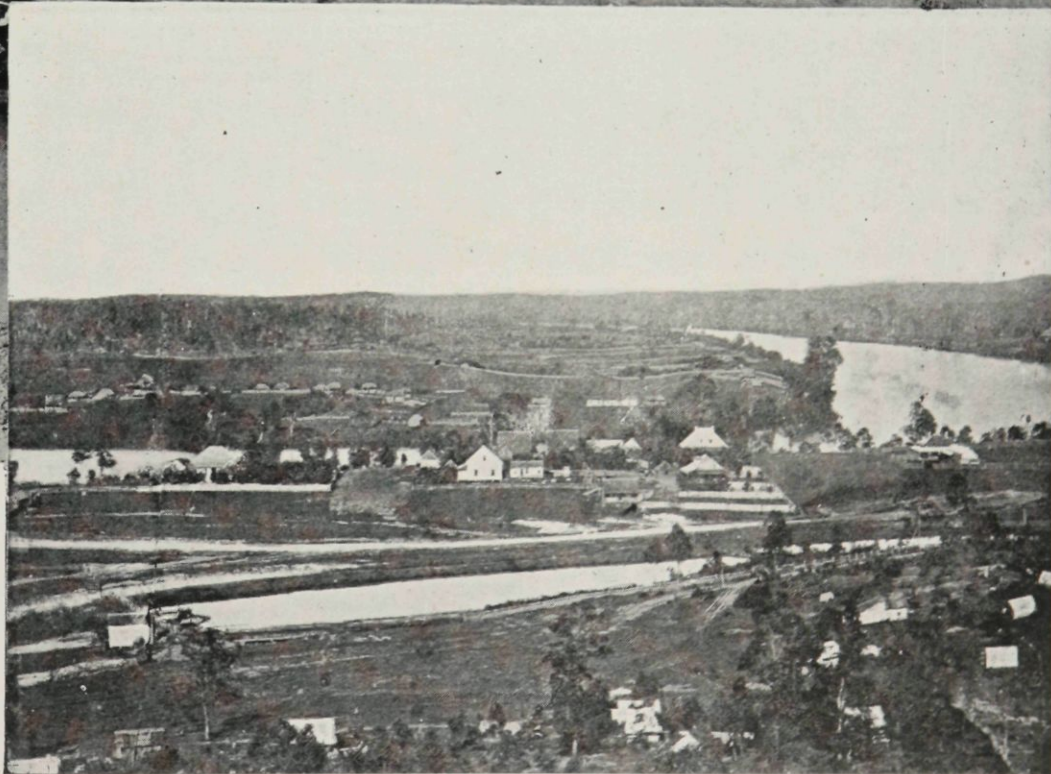


MOUNT CROSBY, 1899.

to the Botanic Gardens which, dividing with Government House grounds the point of alluvial land, once dense scrub with lofty pine trees, round which the river sweeps, a wedge projecting from the city, within musket shot of the busiest centres, has been converted into a lovely pleasure ground.

An excellent system of street tramways, on the electric overhead trolley plan, traversing the main street with a double line of rails, branches at both extremities, and affords easy, frequent, and rapid communication with numerous suburban localities, extending its ramifications for many miles. The electric light is availed of to a limited extent for shop-lighting, but, as yet, for general illumination gas has not been displaced, although a movement is in progress for the substitution for street-lighting of electricity.

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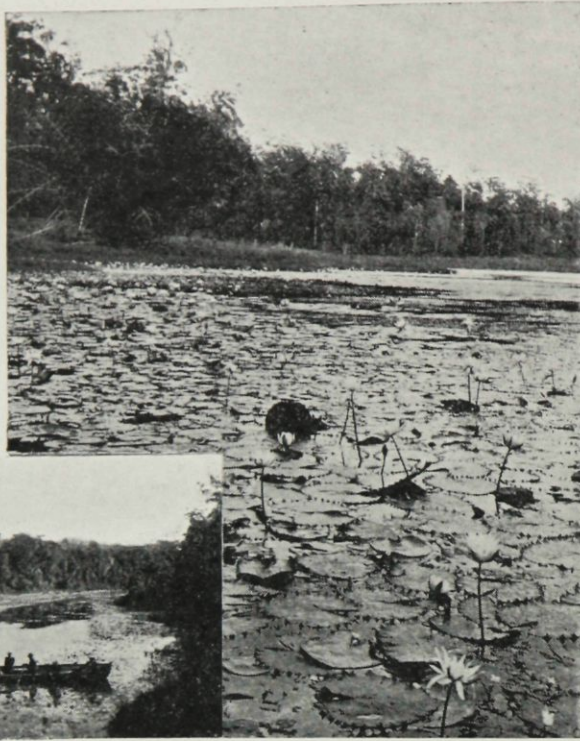
OLD RESERVOIR, 1862.

#### Brisbane Water Supply—Earliest and Latest.

tidal influence, where its sweet waters flow unceasing, a powerful steam pumping plant has been installed, and supplements the supply. Where this pumping station has been located is almost identical with the spot where Oxley, in his final exploration of the Brisbane River, turned back, finding the further ascent by boats not at that time feasible.



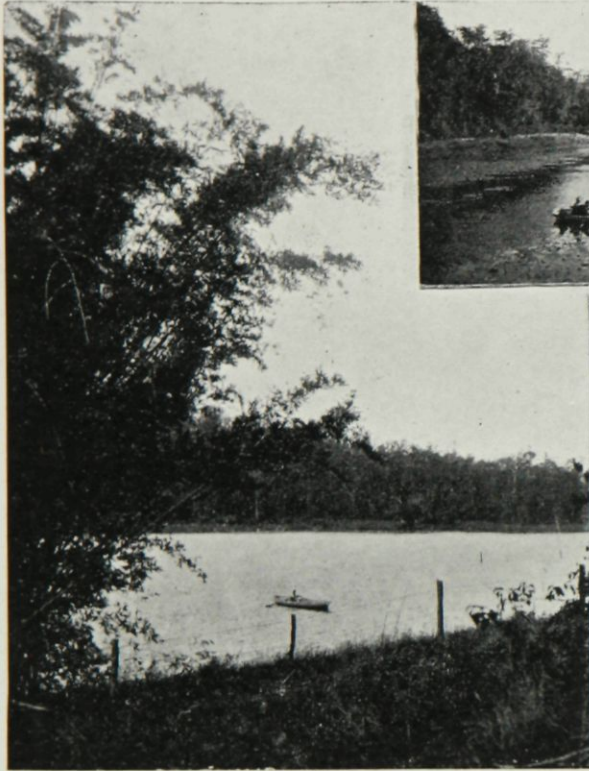
The recreation of the people is ministered to by a variety of pleasure resorts. Naturally in a climate at no season severely cold, and rather tending in the height of summer to a warmth of temperature which induces people to court the open air, the various botanical gardens and sea-bathing places are most in favour. The residents of the capital have a choice of water-side resorts, fringing Moreton Bay. Sandgate, the earliest established of these, because the



known by that designation. The situation is more open to the ocean breezes and tide than is Sandgate; but, access being only by road or by excursion steamer, the place is less resorted to. Still further is Caloundra, facing the open ocean, a beautiful, but as yet scarcely convenient, watering-place.

South of the embouchure of the Brisbane, the shores of Moreton Bay are studded with marine villages, reached by a line of railway, constructed specially to provide access thither, and having its terminus at the settlement at Cleveland, which the Ipswich people once proposed to develop to the extinction of Brisbane. Further south, and fronting directly the channel by which at the extremity of Stradbroke Island the ocean connects with Moreton Bay at its

southern extremity, stands Southport, an ideal seaside place. Here the ocean breezes sweep in uninterrupted, and the billows of the Pacific, expending their violence on a bar of sand, lave the inner beach with gentle ripples of crystal waters. Pleasure-seekers who enjoy the spectacle where "loud surges lash the sounding shore," have but to be ferried over the mouth of Nerang Creek, which here empties into the Bay, and a magnificent sandy beach stretches for miles to a bold basaltic headland, known as Burleigh.



Enoggera Reservoir, near Brisbane.

nearest to the city, has a long jetty and an enclosed swimming bath, and is situate to the north of the river mouth. A frequent service of trains, occupying but half-an-hour in the journey, makes the place convenient for business men, and accordingly not a few have there marine cottages, where they pass with their families the summer months. More remote is the village of Redcliffe, the site of the earliest lodgment of settlers in Moreton Bay, subsequently deserted on removal of the establishment to the preferred situation of Brisbane, up the river. The abandoned buildings were referred to by the aborigines in their dialect as "Humpy Bong"—i.e., dead house; and the locality was long



TREASURY, GEORGE STREET, BRISBANE.



VICTORIA BRIDGE, BRISBANE.



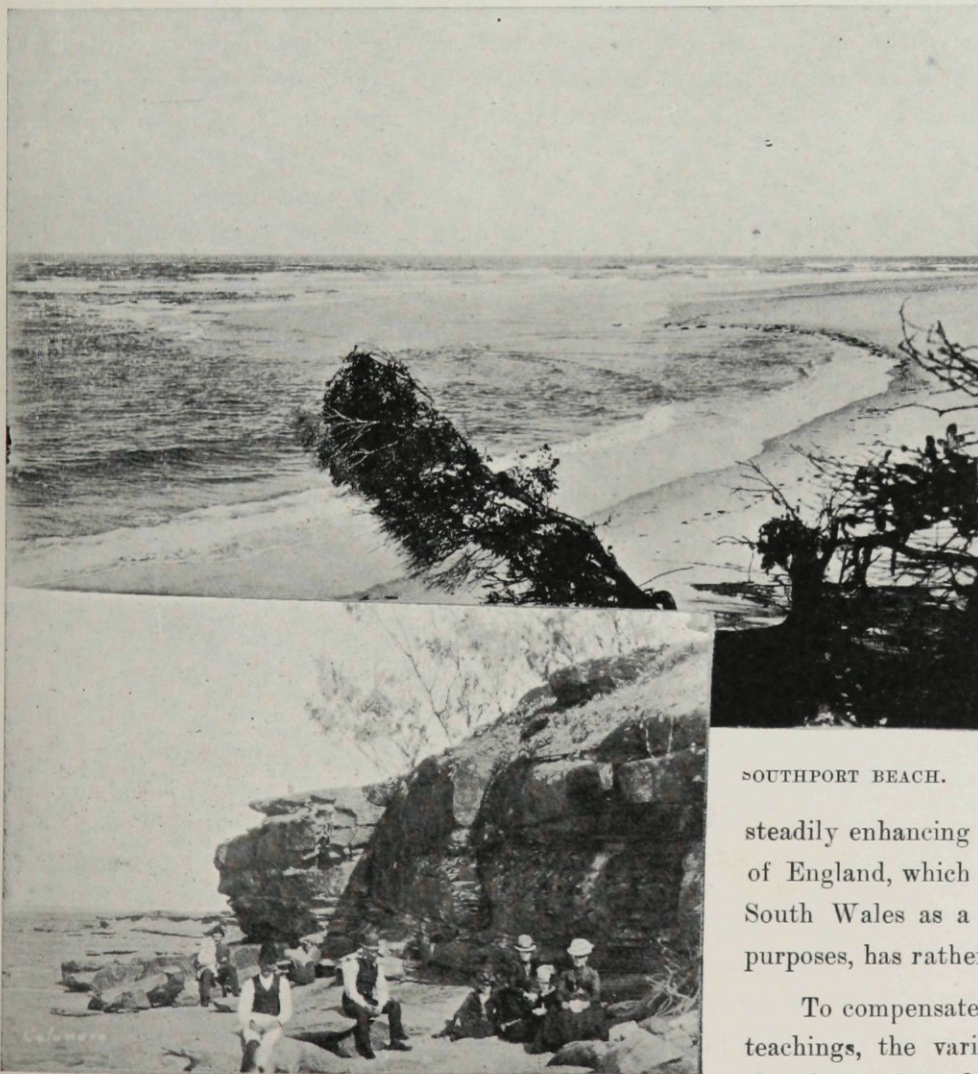
GOVERNMENT HOUSE, BRISBANE.



For indoor amusements every town has, if not a regular theatre, at least a hall, with some sort of stage and proscenium; and theatrical companies, after exploiting the greater Australian cities, travel through the minor centres of population. The musical art is everywhere cultivated, and, when professional concert performers are not available, amateurs, organised in choral or orchestral unions, provide entertainment. Cricket in summer and football



Sandgate Jetty and Swimming Bath.



CALOUNDRA.

Brisbane Seaside Resorts.

in the winter months are as popular in Queensland as in Great Britain, and it must be a very tiny settlement which has not its cricket pitch and its clubs for each game, while there will generally be found a "court" where the fair sex can participate in lawn tennis.

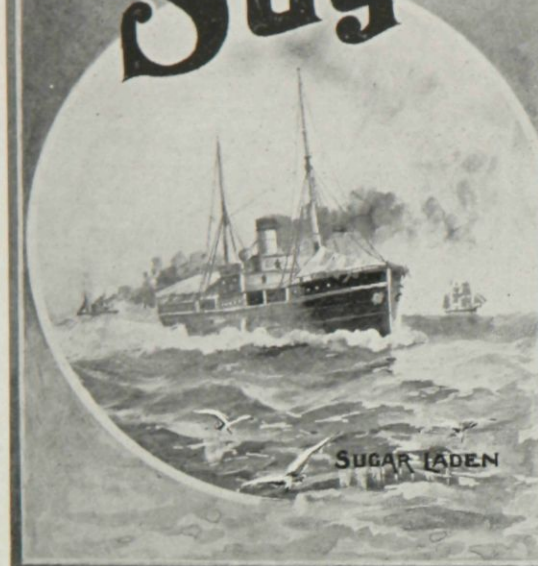
The ordinances of religion are not neglected. Even in mere hamlets some building such as the limited means of small and struggling communities can afford is generally built, and often serves alternately for the Sunday services of any Protestant denomination of which a minister may visit the place. In the larger centres the distinctions of sect are kept more distinct, and in the principal towns churches and chapels are provided at the expense mainly of resident congregations. The Church of Rome, more punctilious than the Protestant bodies, does not favour the sharing of one common building, and by a superior financial organisation has generally managed to secure very superior sites for its churches, supported by contributions of the faithful and by sagacious purchases in the early days of considerable tracts of land, steadily enhancing in value. In the capital and other principal towns, the Church of England, which received in the former, while Queensland was yet a part of New South Wales as a Crown colony, some valuable endowments of land for Church purposes, has rather a shabby cathedral and several handsome churches.

To compensate for the omission from the State-school curriculum of sectarian teachings, the various denominations provide, each in connection with its own church, Sunday-school instruction, where the young receive those polemical impressions which are regarded as essential to mould their spiritual dispositions. On Sundays all business is suspended: public-houses, shops, and stores are closed.



# Sugar

# INDUSTRY



**ALTHOUGH**, as already remarked, sugar is not positively King among the agricultural products of Queensland, it stands only second in rank. That the climate of Queensland is suitable for the growth of this reed, struck the earliest visitors. In an early account of the settlement at Brisbane Town, as it was then known, two Quaker gentlemen, philanthropic imitators of the illustrious Howard in the field of gaol reform, who voyaged even to this ultima Thule of convictdom, in its early stage as a penal settlement, remarked that the cultivated land, where now the Botanical Gardens are clothed with sylvan beauty, was separated into plots by belts of sugar-cane. About 10 years later, in 1838, a West Indian planter, a Mr. Mayo, visited the settlement, and with official sanction planted 30 acres with 47 kinds of cotton, from seeds collected by him in various parts of the world. A small plot he also devoted to coffee plants brought from the mountains of Arabia and from Mauritius. Some acres were appropriated to sugar-cane from the Mauritius, and a cane he found growing in the settlement—doubtless that mentioned by Quaker Walker. Returning to London, Mr. Mayo reported his enterprise and asked for a modest grant of 50,000 acres, or for 100,000 acres at 5s., payable by instalments. We hear no more of Mr. Mayo. Again, in 1845, Colonel Barney, recalled from Port Curtis, protested that the abandoned settlement there might have been turned to good account by the cultivation of sugar, cotton, and coffee. But it was not till Queensland had a Government of its own that any real commencement was made with any of these industries. In 1862 a special Act was passed, granting, subject to certain conditions as to expenditure and cultivation, areas of land for the growth of sugar and of coffee. Men with means and enterprise were not numerous; but some there were. The Hon. Louis Hope, a cadet of the noble house of Hopetoun, was one of the pioneers. Captain C. B. Wish was another. The richer tracts of forest land, fronting Moreton Bay, at Pimpama, Cleveland, Caboolture, and some other places, were soon waving fields of cane; and steam crushing mills, with all necessary appliances for conversion of the juice to sugar, were duly erected. The

late Mr. George Raff, then a leading Brisbane merchant, launched out in the same direction, and presently the industry spread to the banks of the Logan, Albert, and Coomera Rivers, and, indeed, invaded most of the alluvial farms on the lower Brisbane itself. Captain Hope was not at first successful. The pioneer of any industry, under conditions entirely novel, seldom does succeed in enriching himself. Captain Hope had lived as a pastoralist on the Upper Brisbane, on Kilcoy Run, and doubtless was acquainted with the ordinary processes of bushcraft. But as a pioneer sugarmaker, he had to adapt himself to a multitude of functions. He had to have forest and scrub cleared and enclosed, broken up and triturated, planted with suitable cane, cultivated and trimmed, cut and carried. He had to see to the erection of his mill and adjustment of machinery and boiling plant. He had to arrange for the rather delicate processes of manufacture, and finally he had to turn merchant and manage his sales.

Such are the complicated difficulties, merely in outline, which have to be surmounted by the pioneer in any newly-introduced industry. Captain Hope grew his cane and brought it to the mill. But his first boiling was a failure. Inasmuch as he also crushed and boiled for neighbours who, relying on his mill, had planted areas with sugar-cane, his misfortune was somewhat contagious. Captain Wish, however, surmounted all mechanical difficulties, and turned out very good sugar, selling at from £27 to £28 per ton. But he also had to succumb to financial incompatibilities. Still the industry was perceived to have a solid basis, and spread extensively. The soil on the banks of the Pioneer River was judged particularly adapted for the cane, and the climate more suitable, because hotter, than that of Moreton Bay, where not even propinquity to the equalising influence of the ocean always saved the susceptible cane from a damaging nip of frosts in the winter season. From Mackay, on the Pioneer River, the industry rebounded to Bundaberg, on the Burnett, elsewhere particularised, where maize-farmers rapidly substituted the cane for the grain plant to such an extent that, in 1899, it actually happened that maize from California was being sold in Bundaberg to supply the local demands for horse-feed.



Sugar plantations spread as though they were a sort of industrial spore, northward along the coast. Wherever there was a tract of suitable soil a plantation sprung into existence, ordinarily with a mill as a secondary symptom. At Yeppoon, on the oceanward slope, near the mouth of the Fitzroy, considerable fields were planted. Bowen has its plantations, and the delta of the Burdekin is an important centre.

The city of Townsville owes its inception to the enterprise of the old seaman, turned merchant and speculator, after whom it was named. The Hon. Robert Towns, member of the Legislative Council of

Under the shelter of Magnetic Island, Ross Creek disembogued into an ample roadstead. The locality was known to few save skippers and crews of coasters. Land suitable for sugar-cane was to be had from the Government of Queensland almost for the asking. So a plantation was established, and Townsville was a name added to the map.

But it was destined to become more than a geographical expression. The roadstead formed by the shelter of Magnetic Island is capacious, although the water shoals somewhat gradually landward, and it has been necessary to supplement the distant shelter of the island by a



FLINDERS STREET, TOWNSVILLE.

New South Wales, ex-master mariner, South Sea Island trader, in which pursuit he laid the foundations of a great fortune, saw his way to augment his wealth by engaging in sugar culture in Queensland. His long connection with the South Sea trade, his numerous trading stations on the islands, and his proprietorship of a fleet of vessels regularly cruising among the groups and to and from Australia made it an easy matter for him to procure as many kanakas to labor in his Australian plantations as he might need. After establishing a plantation and a mill on the Logan River, he carried his enterprise northward.

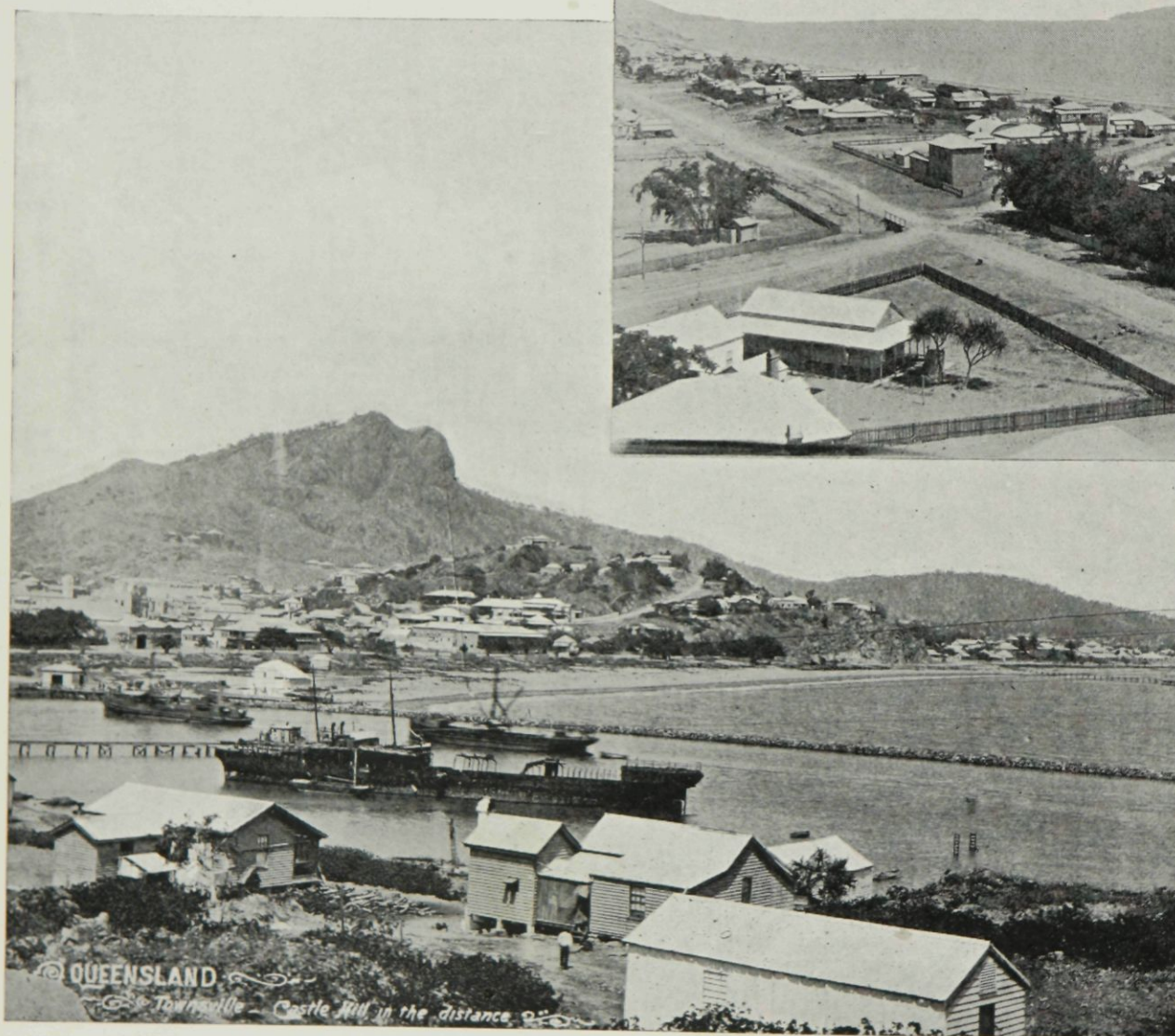
breakwater of some magnitude. Townsville is the chief port of the Northern portion of the eastern seaboard of Queensland. For vessels of moderate draught, Ross Creek provides wharfage facilities on its banks. The resources of the interior, for which the place serves as a port, are so diversified, and withal so ample, that the rise of the town has been as substantial as it has been rapid. The principal street, which follows in a general direction the course of the creek, and extends between that watercourse and the rough acclivities of Castle Hill, an imposing rocky mount, is named after the enterprising and



unfortunate Lieutenant Flinders. Lateral branches being prohibited by the narrowness of the space between the creek and the hill, this street has extended over one and a-half miles, and presents to view the number of substantial buildings which advertise the importance of the business transacted in the place. With fat agricultural lands close at hand, and wide districts of cattle stations further inland, the town would be flourishing enough, from the output of sugar and other products of tilled soil, the preparation of preserved meats, the exportation of carcasses chilled or frozen. But when to these resources are added the purveyance to and from the richest of Queensland's gold fields—Charters Towers—and ministration to a number of others of considerable present and infinite future importance and to areas of pastoral and mineral country tapped by railways which, having Townsville as their seaward terminus, penetrate westerly over

one lad, Morrill by name, who, after seventeen years' association with the tribes, living as one of themselves, survived to be extricated by the advance skirmishers, so to speak, of the army of pastoral occupation which began then to occupy these regions in the colony of Queensland.

Still further North, on the banks of every one of the minor rivers which discharge, bordered by rich alluvium and dense scrubs, into the Pacific, the axe and the plough have been busy, and wide fields of cane



Townsville.

CASTLE HILL IN THE DISTANCE.



Townsville.

LOOKING TOWARDS THE SEA.

have replaced great areas of jungle. The littoral of that fine salt-loch or lagoon, which will one day be the harbour of Cairns, and the lower reaches of the Barron River, reflected the fluttering foliage of great fields of the saccharine reed. Close to Port Douglas and towards Cooktown, on the Bloomfield, once a cedar scrub, sugar is indeed King.

The developments of the sugar business have been truly remarkable. They supply a story of an expanding industry coincidently with a falling price.

300 miles, the combination seems to secure for Townsville an enduring eminence. The population exceeds 12,000, the habitations and other buildings number about 2,500, and the rateable value of the property within the municipality exceeds quarter of a million. It is about half a century ago that in this vicinage a party of castaways drifted to shore on a raft, and, in the absence of any settlement, fell into the hands of the aboriginal blacks, who at that time were sole masters of all the potentialities of the place, and perished, with the exception of

On two occasions during the closing decade of the nineteenth century, the sugar-planting industry in Queensland has been closely investigated by independent inquirers from abroad. In one instance the investigator was not an expert; but what was, perhaps, equally valuable, or more so, in many respects, a person of high intelligence and all-round aptitude. This was Miss Flora Shaw, from the staff of the *London Times*, one of those exceptional women who enter into positions ordinarily monopolised by the male sex, and exhibit an



excellence which few men have achieved. Miss Shaw, on her return to Printing House Square, after passing under review all the leading characteristics and principal industries of the Australian colonies, became famous, it will be remembered, by the "masterly" finger she managed to thrust into the South African hasty-pudding at the time of the Jamieson Raid. This lady's tour and researches occurred in 1893. Some years later a similar round of visits to the principal centres of the industry was made by a gentleman whose qualifications were of quite a different kind. Dr. Maxwell, Director and Chief Chemist of the Experiment Stations and Laboratories of the Hawaiian Sugar Planters' Association, since engaged by the Queensland Government as adviser on this industry at £3,000 per annum, was invited by the Government in 1899 to investigate the condition of the sugar industry in Queensland, and early in 1900 presented a report. Thus the later report by a specialist serves to fill in any matters which may be left in the earlier treatise of the journalist. Taken together they constitute a complete text-book relating to the political and physical surroundings of the industry in Queensland. The *Times* articles are no doubt already somewhat out of date in some respects, as conditions vary rapidly in new countries. But, checked by the later particulars collected and published by the Government Statistical Officer, and the Department of Agriculture, they still serve admirably, even although some of the *Times*' inferences, presented as though they were conclusive, might be challenged as not fair deductions from the facts adduced.

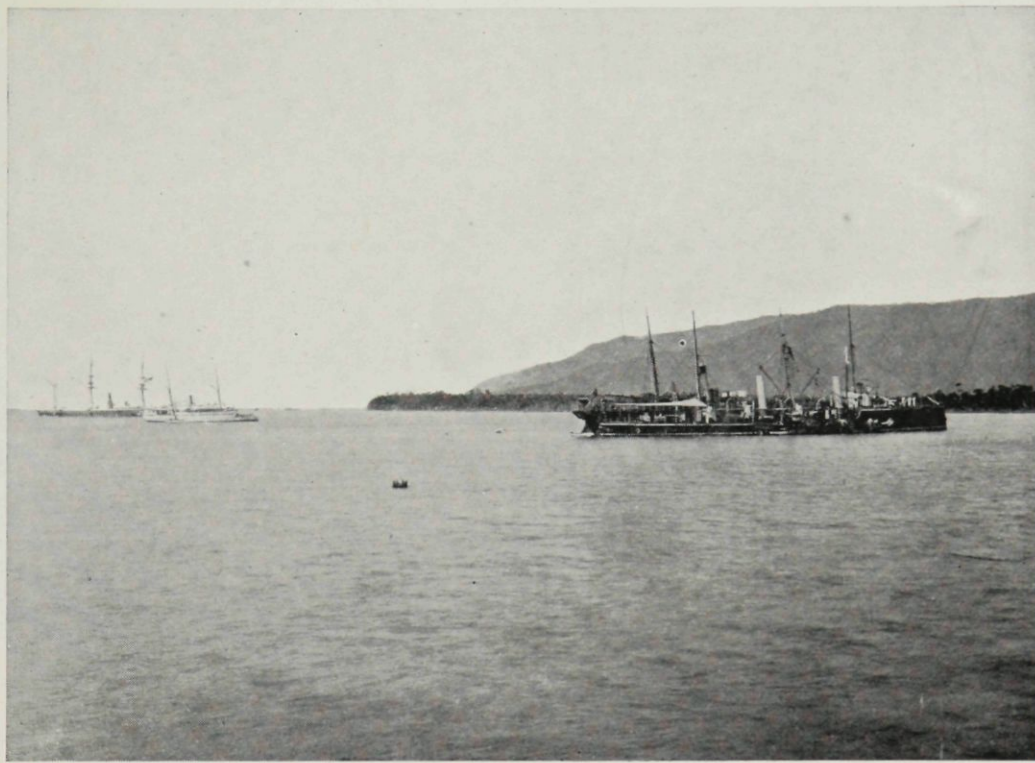
It is impressive to mark the decadence of prices obtained for sugar, coincidently with an immense expansion of the industry. In 1872 Captain Whish, although his manufacture was of inferior quality, obtained from £27 to £28 per ton. In 1893, the *Times*' representative, giving ascertained figures, from the books of a mill-owner, whose estate 13 years earlier was a dairy farm, employing eight hands, and when visited in 1893 supported 212 whites and 420 kanakas, set down the selling price at £11 15s. per ton. In December, 1899, the annual reports of Central sugar mills gave the average price realised for sugar at from £8 10s. to £8 13s. 7d.

The consideration of the sugar industry in Queensland has been tangled by a very bitterly disputed political problem. From the first

it was asserted by the wealthier planters, that cheap labor by men of races inured to tropical conditions was essential. Without that the industry would not pay. And in numerous instances they overproved their contention by employing South Sea Islanders, and then failing to make their enterprise pay. On the other hand a large section of the white population, influential by its numbers, insisted that the kanaka was not necessary to the industry and that his transference from his native isles to Queensland was equally pernicious, in a moral sense, to the savage or to the civilised population amongst whom he was thrust. This is a dispute which it is foreign to the purpose of this work to meddle in. It will be sufficient to quote from the officially issued introduction to the pamphlet containing the *Times*' papers, and from some other apparently impartial commentators. The first mentioned deals with the matter thus :—

"The popular idea of the sugar industry is unfortunately one that

centres round the political questions involved in it. The producer is supposed to be working at a heavy loss, with every prospect of insolvency if the country does not grant the impossible boon of unlimited cheap coloured labor. The planter of to-day is supposed to be identical with the more or less mythical individual who did duty as such twenty years ago. The sugar industry is regarded as an aggregation of decaying estates owned by absentees who are endeavouring to make their investments profitable by the extensive use of



The Roadstead, Cairns.

low-waged aliens. All these ideas are quite erroneous, and the industry, as it is, is the most thriving and prosperous of the agricultural industries of Queensland. The mill-owner is enlarging and improving his factory, and, with hardly an exception, the owner himself superintends the work. Kanakas the country allows him, but these are only means to an end. The end is to tenant the large estates with farmers. The gang labor system is doomed because of its inherent expense; the mill-owner must have cane, and so proposes to get contractors to grow cane for him. He goes so far as to offer his land on easy terms of purchase to whoever will supply his mill with cane."

Viewing the situation seven years after the above was published, Dr. Maxwell, the Hawaiian expert, since definitely retained in the service of the Queensland Government, reported that "it is found that most of the large sugar-growing estates, which were originally in



the hands of large planters, have been cut up into farms and rented or sold to numerous cane-growers. . . . These facts place before us a situation that is almost unique and peculiar to Queensland. In other sugar-growing countries the estates are in the hands of extensive owners or controlled by large corporations, which state carries with it the consequence that a minimum number of white men are located on the land. In this colony this ownership or occupancy embraces a vast number of strong, progressive white men, who are planted over all the sugar-growing areas. These men furnish the material which puts the mills into operation, and, as the mills depend wholly upon the fields, it appears that the future of the sugar industry of the colony is very much in the hands of those numerous and small cane-growers."

The area under sugar cane in 1899, which is the latest date to which, at the time of writing, official figures are available, was 10,657 acres. The output of sugar was 123,289 tons, to produce which 1,176,466 tons of cane were milled. In addition to the sugar there was a by-product of 3,092,571 gallons of molasses. But it must be noted that only a proportion of the acreage under cane was harvested. The cane crushed was the crop from 79,435 acres. Thus the average yield of cane per acre was 14.81 tons per acre for the year, as against 18.72 tons per acre for 1898, and 12.30 tons per acre for 1897. The average yield of sugar per acre was in 1899, 1.55 tons; in 1898, 1.99 tons; and in 1897, 1.50 tons.

Explanations for the diminished yield of cane and of sugar per acre are furnished in particular localities by such climatic accidents as frosts, lack of rain, and by prevalence of grubs. But, outside of these casualties, evidence is ample of a decline of soil fertility in the localities where cane has been longest the staple crop. This serious circumstance is receiving the attention appropriate, and the sugar-planters, amongst whom are numbers of men of high intelligence, are on the *qui vive* to remedy the mischief. The cause is apparent and simple enough. It is the experience of Virginia over again. In the Southern States of America, plantations abandoned and reverting to original thickets were at one time common enough. Persistent cropping had exhausted their fertility. This is just what has been approaching in the older sugar-growing settlements in Queensland. But

the alarm has been sounded before an unconditional surrender had become imperative, and the necessity for restoring to the cane fields the nutritious constituents of which they have been drained, season after season, is accepted as established. The soils in every district from Cairns in the North to the Isis Scrub, south of Bundaberg, yielded enormously when first cropped. Instances are alleged of 70, 80, and even 100 tons of cane having been cut per acre. But, apart from these extraordinary instances of fecundity, a yield of 40 to 50 tons per acre was a standard for years, as is proved by records from Mackay, Bundaberg, and other places. Now, there has



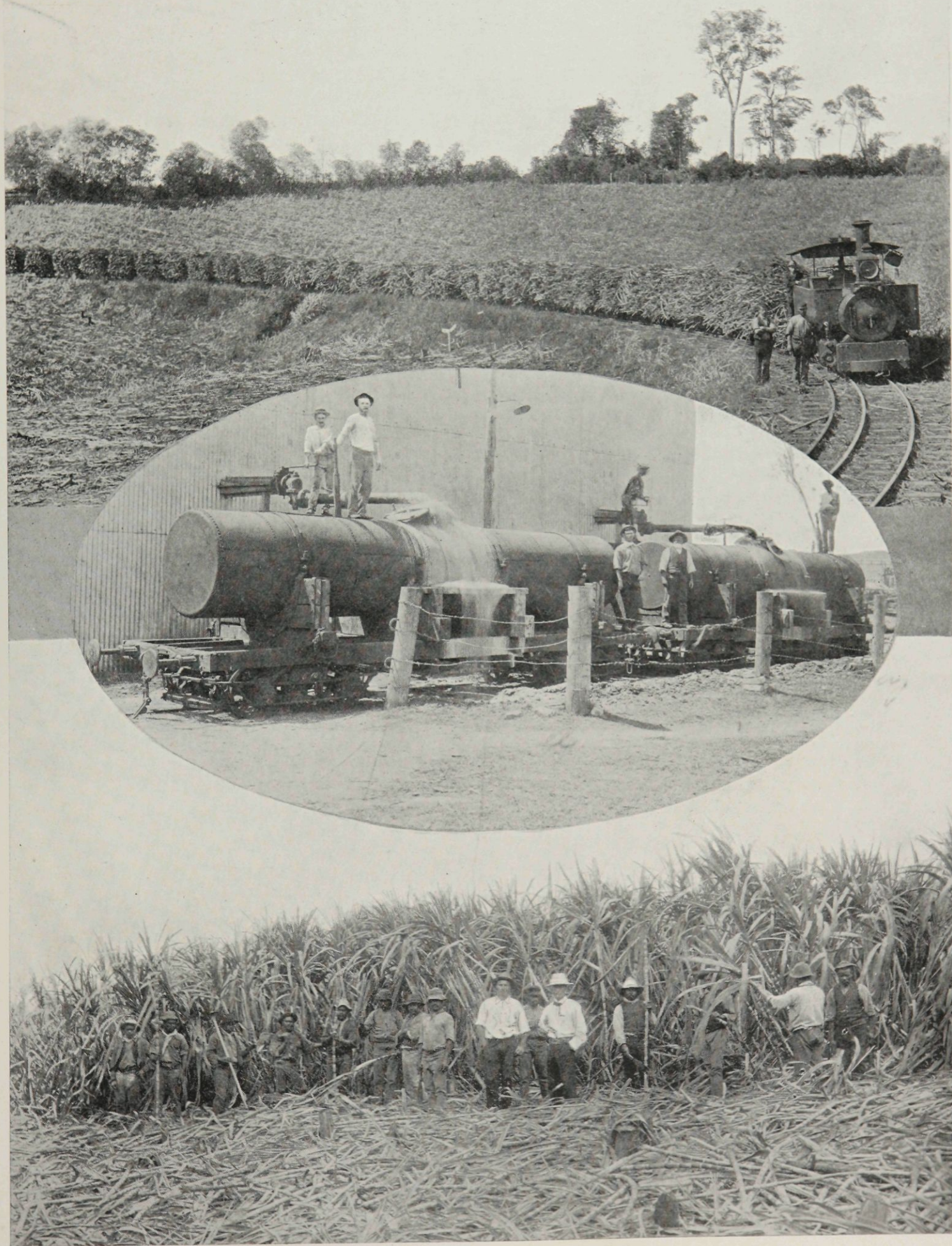
CANE HARVESTING—CUTTING.

been a declension to about 22.7 tons at Isis, 18.1 at Bundaberg, 10.8 at Mackay, and 20.1 at Cairns. As many as thirty successive crops have been taken off one field, without any refertilizing elements being ever applied to the land.

A FIELD TRAM.

It is easily perceived, therefore, that while the natural conditions for successful sugar production are present in almost lavish abundance there has been such extravagance in dissipating such as are capable of consumption that, unless a radical change of system be adopted in the older districts, the industry can only be maintained up to its present dimensions by constant reclamation of wild lands. Apparently the stage has been reached, when, on present lines, as many acres of old plantation would have to be thrown out of cane-growing as there would be acres of fresh soil won from the scrub and the forest. The present Minister for Agriculture, the Hon. J. V. Chataway, in his opening address at a Pastoral and Agricultural Conference at Mackay, in June, 1899, reminded planters that Java and the Sandwich Islands produce





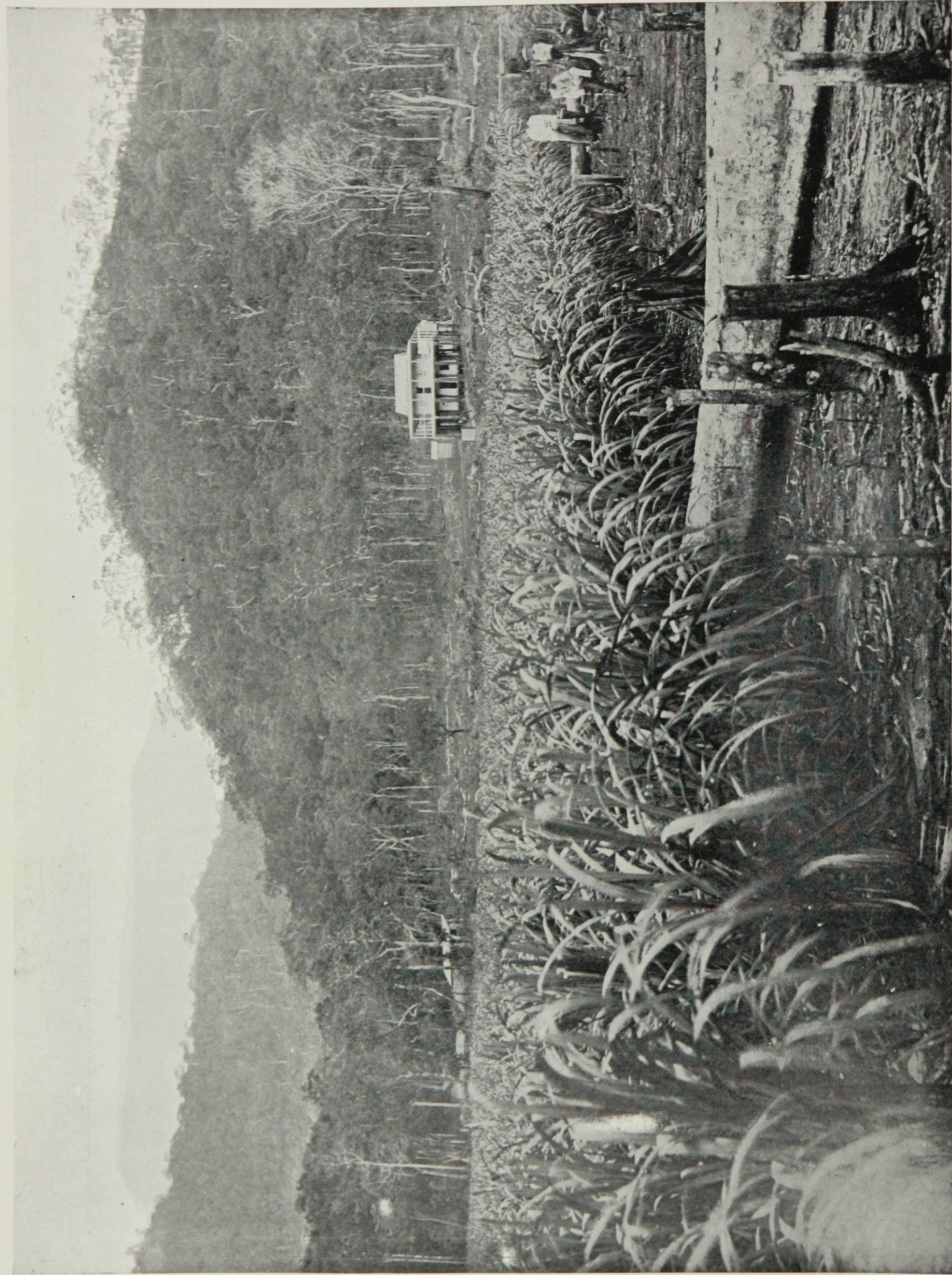
THE SUGAR INDUSTRY.

A CANE TRAIN.

CANE-JUICE TANKS ON TRUCKS.

IN THE CANE-FIELD, KANAKAS AND OVERSEERS.





YOUNG CANE (Hambleton).

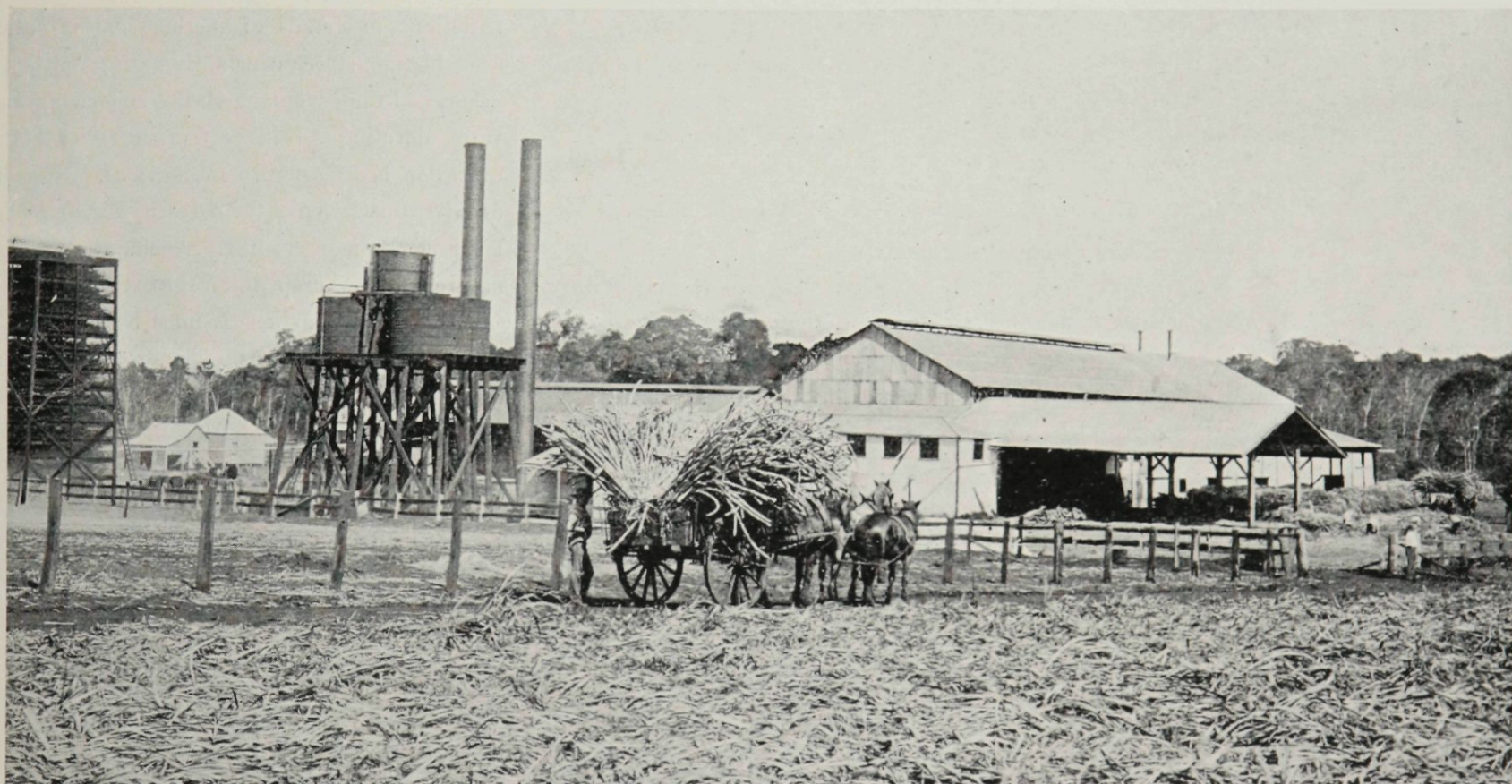


three times as much sugar to the acre as is the return in Queensland, and frankly told his audience that the difference was mainly attributable to the superiority of the system of cultivation and manuring in those comparatively ancient plantations.

The unmistakable fact is that the sugar industry in Queensland is only in its infancy. The pioneers have warred with difficulties innumerable. Many brave men fell in the conflict. But, reinforced, others fought on and stormed, one after another, the entrenchments of inexperience, plant diseases, labor troubles, and other minor obstructions by scores. Much advance has been achieved, and, on the whole, prosperity has been attained by many, and diffused widely among others not actively participating in the campaign. But there are strongholds yet to be conquered. Years of great profit have been, to some extent, to sugar planters what the ease of Capua was to the soldiers of

State under the provisions of the Sugar Works Guarantee Act, presently to be referred to; which distributes annually £600,000 in wages to 9,000 white laborers, and £200,000 among 8,000 kanakas. As it approaches adolescence it is but natural that it should exhibit some looseness of the joints and give some anxiety with regard to its development and future. But as prices have sunk, so, in a degree, economy in working has been secured. The labor problem, still possibly not devoid of acuteness, appears in course of having the edge dulled by the progress of mechanical invention. We cannot better illustrate this tendency than by a quotation from a paper read before the Mackay Convention by Mr. Gideon W. Pott, of the Proserpine River, Bowen:—

“Signs are not wanting,” wrote Mr. Pott, “which point to a complete revolution in the conditions of sugar-growing, caused by the



North Isis Sugar Mill.

Hannibal. They have to brace themselves for a fresh struggle. That the sugar industry will firmly establish itself—more firmly, more solidly than ever—there can be little doubt. Reiterating in his own language what the London *Times* emissary had already in substance stated, Dr. Maxwell, after visiting all parts of the sugar-growing regions of Queensland, found that “in this colony the ownership or occupancy embraces a vast number of strong, responsible, and progressive white men, who are planted over all the sugar-growing areas.” A perusal of the papers read at various conferences by actual planters furnishes corroboration of this appreciation of the sort of men who are engaged in the industry.

This is indeed a promising baby industry, which already furnishes investment for five millions sterling of private capital—much of it, doubtless, capital of its own creation—and £550,000 of capital advanced by the

introduction of labour-saving machinery, similar to the effect produced upon other agricultural industries by the use of machinery. The application of mechanical means to the planting, cultivation, and harvesting of cereals and other products (amongst them the sugarcane's great rival—beet) has so completely revolutionised these industries that, in spite of the tremendous fall in prices during the last ten years, these can still be produced. We hear of the impossibility of machines being used in the harvesting of cane, but what seemed more improbable twenty years ago than the idea that a machine, drawn by two horses and driven by one man, could do the work and take the place of twenty or more laborers in the wheat field? Who could have foreseen, at that time, the possibility of shearing sheep by steam power? History will repeat itself in the case of our industry. Already we have a machine for planting cane which, when perfected, will enable



one white man to do the work of half-a-dozen kanakas, and the day is not far distant when a machine will be produced to take the place of the large gangs of coloured laborers at present required in the fields in



Mackay—On the River.

the crushing season. By these means the farmer, by reducing the number of his employees, will be enabled to pay good wages to whatever white labor he requires, and our industry will no longer be dependent for its existence upon a supply of cheap labor, so distasteful to the white population of Australia."

The wide diffusion of similar ideas is testified to by the circumstance that we find them cropping out again in a paper read at the same conference by a planter residing in the Mackay District, 100 miles from the home of the author of the paper first quoted from.

Mr. Denman, of Etowi, Mackay, is not so sanguine as Mr. Pott, but his reflections draw him to the same aspirations. The cane planter, he laments, has not been benefited by mechanical invention in the same degree as the ordinary farmer has been. "Notwithstanding," he remarks, "the large rewards which have been repeatedly offered in the old cane-growing countries, where there is no labor problem to be solved, and the certain fortune which awaits any genius who can accomplish it, so far, a cane-cutting machine has baffled mechanical skill."

The stern logic of facts steadily pressed upon the sugar-planting settlers the knowledge that in that industry it was becoming increasingly hopeless for individuals, however ingenious and industrious, to combine the arts of grower of cane and manufacturer of sugar. On a very large scale, indeed,

the combination was possible, although even so it is being found by large mill-owners more to their advantage to lease their plantations in farms to agriculturalists, and buy the cane for the mill. But for the

small planter, with his few score acres in cane, it was almost a hopeless business to be sugar manufacturer too, with a bit of a mill, representing capital idle all but a few months in the year. Moreover, sugar-boiling is an art, requiring a concentration of any man's faculties just as much as any other specific trade. As in most other complicated processes, in which excellence of result is dependent on nice observation of every stage of treatment, a man may do nothing else all his life and, after twenty years of practice, still be learning something. Add to this that variations in details of method and invention affecting appliances constantly or intermittently occur, and the advantage of the sugar manufacturer devoting all his attention to that one avocation becomes still more obvious. No more decisive illustration of the necessity for division of labor could be presented. Again, the peculiar nature of the crop intensified the necessity.

Sugar-cane is a tremendous crop to handle. It must be put through the rollers almost immediately after it is cut. The grower of wheat might much more conveniently be his own miller than the sugar-cane planter. Once the wheat crop is in stack or barn, it will keep any



Cocoanut Palms, Mackay.

reasonable length of time. The grain, once it is thrashed, will, if properly stored and protected, keep practically for ever, as the discovery of kernels of wheat in mummy-cases in Egypt has conclusively shown.



Yet, from the remotest antiquity, it appears that the grain grower and the miller have been different individuals.

The old folk-lore of every European nation we are acquainted with teems with references, generally satiric, to the relations between farmer and miller. The ballads of England and Scotland, and even the popular airs of the days antecedent to the introduction of steam and wholesale dealings, are rich in references to the abnormal size of "The Miller's Thumb," which was supposed to exclude, as it grasped the measure, its own bulk of grain. And the prosperity of the owner of that profitable thumb became proverbial as an influence productive of a cheerful mind. It is always the jolly miller who figures in song and story.

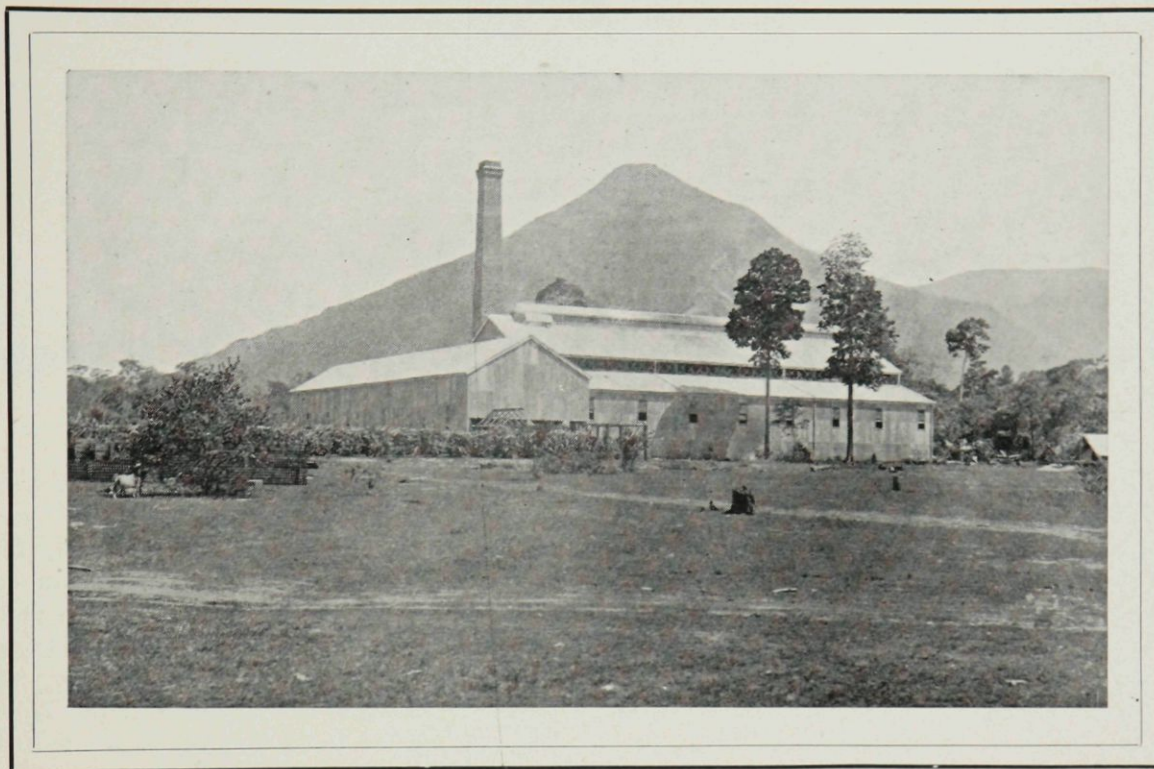
Among the pioneer settlers of the North American continent, where water-power, derived from brooks and streams, is abundant, the grist mill was erected by someone with a bent for mechanics, generally as soon as the crops of a new settlement sufficed to find work for it. The early planter of sugar-cane in Queensland was sadly hampered by the absence of similar convenience for converting his far more perishable crop into an article of commerce. In localities where large mills had been constructed, he could, and still does, sell his cane. Even under such conditions, however, the constant liability of the miller's local monopoly being made an engine of economic oppression, introduced an element of discouragement. And there have been, and will be continuously so long as the industry is profitable, new application of land to cane-growing where forest and scrub or crops of inferior value will be

replaced by fields of cane, provided a mill can be created to convert the juice into sugar. Any uncertainty on that point must act as a deterrent to expansion of the industry.

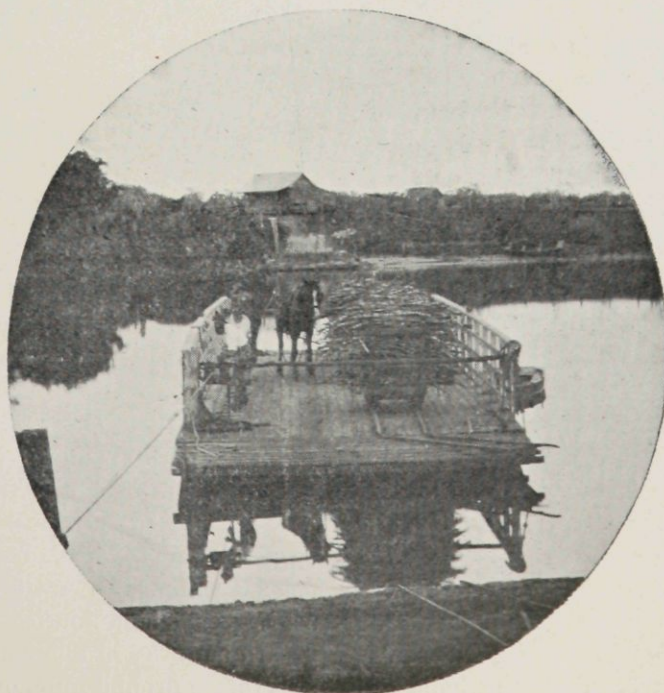
The Parliament of Queensland recognised the requirements of the situation, and in the year 1893 passed a law, the purport of which is clearly expressed in its title:—"An Act to Authorise the making of Advances, by way of Guaranteed Loans, for the Establishment of Sugar Works, and to provide for the Repayment

thereof, and for other purposes connected therewith." By this enactment, with an amendment a couple of years later, the settlers in any locality are enabled to register themselves as a company to construct sugar works, and to issue debentures, which the Government will guarantee, as to principal and interest, taking as security a mortgage over the works so created, and also over the freehold lands upon which the cane for the mill is grown. Ample provision to protect the Treasury is embodied in the Act. The Government must be satisfied

at the outset that there will be sufficient cane grown to profitably supply the mill, and more of similar import. The amending Act empowers the Government itself to buy debentures, but limits the extent of guarantee or purchase, aggregated, to half-a-million sterling. Advantage has been taken of this Act in thirteen instances where central mills, some of which are represented in our illustrations, have been established, and the legal maximum of advances has been slightly exceeded in the aggregate, the total amount of advances having been £541,204. On the whole, the arrangement has worked very successfully.



Mulgrave Central Mill, Cairns District.





# GLADSTONE

And  
its



# Story.

## THE

town and harbour of Gladstone are invested with more varied interest than perhaps any other settlement in Queensland. To be suggestive of great developments in the time to come, is a quality they share with a multitude of other embryotic cities and some other ports. But to have something savouring of antiquity is quite an exceptional quality. Moreover, the undeniable excellence of the harbour inspires, and always since its first discovery by Europeans has inspired, more than ordinarily expansive visions of a splendid future. The actual time, when the excellence of this capacious haven first impressed Europeans, has lately been made the subject of an interesting and lively discussion. The scholarly head of the Roman Catholic Church in Australia, Cardinal Moran, had been distinguished long before he quitted Europe and attained his present dignity as a Prince of his Church, by his passion for research into matters of ecclesiastical antiquity. During a prolonged residence in Rome, he immersed himself in such investigations and studies. Since his arrival in Australia, opportunities for indulgence in antiquarian proclivities can have been contracted almost to extinction. It is, therefore, not surprising that a few suggestive facts fired in his mind a train of eager speculation and research, relative to an antique celebration of the solemn rites of the ancient faith of Christianity upon the Australian continent. The scene of this incident is placed at one of the headlands jutting into the water of what is now Gladstone harbour.

Two survivors of the early Australian settlers at Gladstone attest the following statements. Mr. Richard Ware accompanied, in 1853, the surveying party appointed to lay out the township of Gladstone. They found embedded in the sand at South Trees Point, a brass cannon, a pivot gun, about 5 feet long, with a bore of  $1\frac{1}{2}$  inches, in good preservation, and inscribed "Santa Barbara, 1596." Now, Santa Barbara was, Cardinal Moran states, the patron saint of artillery in Spain.

But, in addition to that, there was discovered on Facing Island, on the Eastern—that is to say the oceanward—side of the island, well up in the bush, the remains of a ship, very ancient, with oaks growing through her gaping sides. Mr. H. Friend, senior, the oldest surviving resident of Gladstone, vouches also for the existence of this remarkable relic, and advances expert testimony as to its character and naturalness. Mr. Ware visited it on one occasion in company with Mr. Colin Archer, of Gracemere Station, near Rockhampton. Now, Mr. Colin Archer was, according to Mr. Ware's testimony, a shipwright and ship builder by profession, albeit a squatter for the nonce. He it was who long years after designed the famous vessel "Fram" for Nansen's expedition, North Polarwards. Mr. Archer recognised the build of

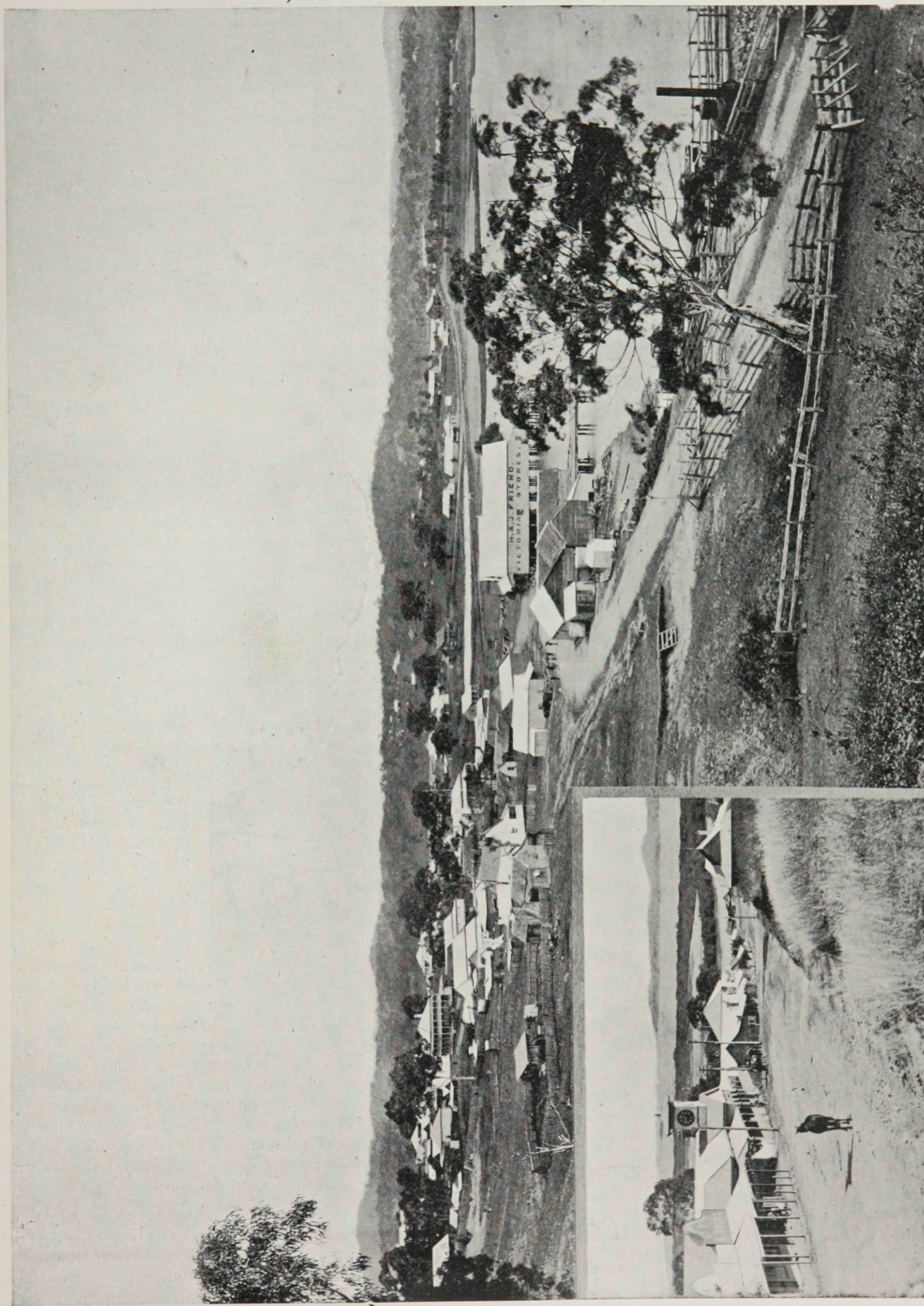
the vessel as Spanish, and dug about it treasure-seeking. Again, on a projecting detached rock at Auckland Point, there was found by the first surveyors a remarkable carving: The face of a man hewn in the stone, in good preservation, as, although in heavy weather, the spray washed over the face, a hollow round it partly protected it. A date was inscribed below it, but partially obliterated, only the first and third figures being clearly decipherable—1500. The face impressed those who saw it as bold and expressive. No work of a prentice hand. The eyes seemed to "follow you as you moved."

At South Trees Point there were other suggestive features. An extensive clearing of timber had been effected at some remote time antecedent. Two wells had been sunk, and lined with "imported timber." There were traces of a building in which teak timber had been used. Then again, a stone erection had been founded some feet in the loose soil. The stone must have been brought from some distance. A large block of stone with smooth surface was noted by the surveyors as having been part of a forge. But others, who saw fragments of it later, observed that it was marked with crosses, and had quite the appearance of an altar stone.

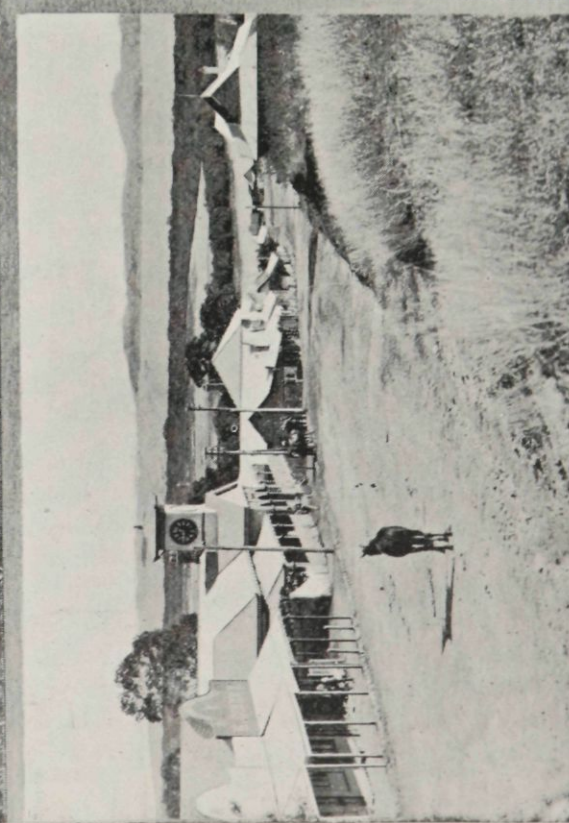
These indications make it more than probable that long before Captain Cook sighted the Eastern Coast of Australia, a Spanish ship was wrecked, and her crew, or part of them, cast away in the vicinity of Port Curtis.

But this is not enough for Cardinal Moran. De Quiros and his squadron must be identified with the first discovery of Australia del Espiritu Santo, and Gladstone Harbour, with his port of Vera Cruz. Accordingly, extracts from De Quiros's memorial to the King of Spain are adduced to establish the identity of places. In these it is stated that from the spot where their vessels anchored there is a coast to the northward, extending East and West at least one hundred leagues. Two considerable rivers—the greater being equal to the Guadalquivir—dehouch into the bay. In the lesser one the smaller vessels of the fleet watered. The landing place is a strand extending three leagues, of heavy black pebbles. The population is great and of various colours—whites, yellow, mulattos, and black, and mixtures of each. They own no sovereign, but group in tribes, "little friendly towards each other." Their arms are bows, arrows, wooden swords, clubs, spears, and darts, also of wood. Their bread is from roots, which are collected in great quantities, grow without labour, and when roasted are agreeable and nourishing. Fruits abound: six sorts of plantains, great quantities of almonds of four sorts; large strawberries of great sweetness; ground nuts, oranges, and lemons; another extremely large





General View of Gladstone.



Main Street, Gladstone.

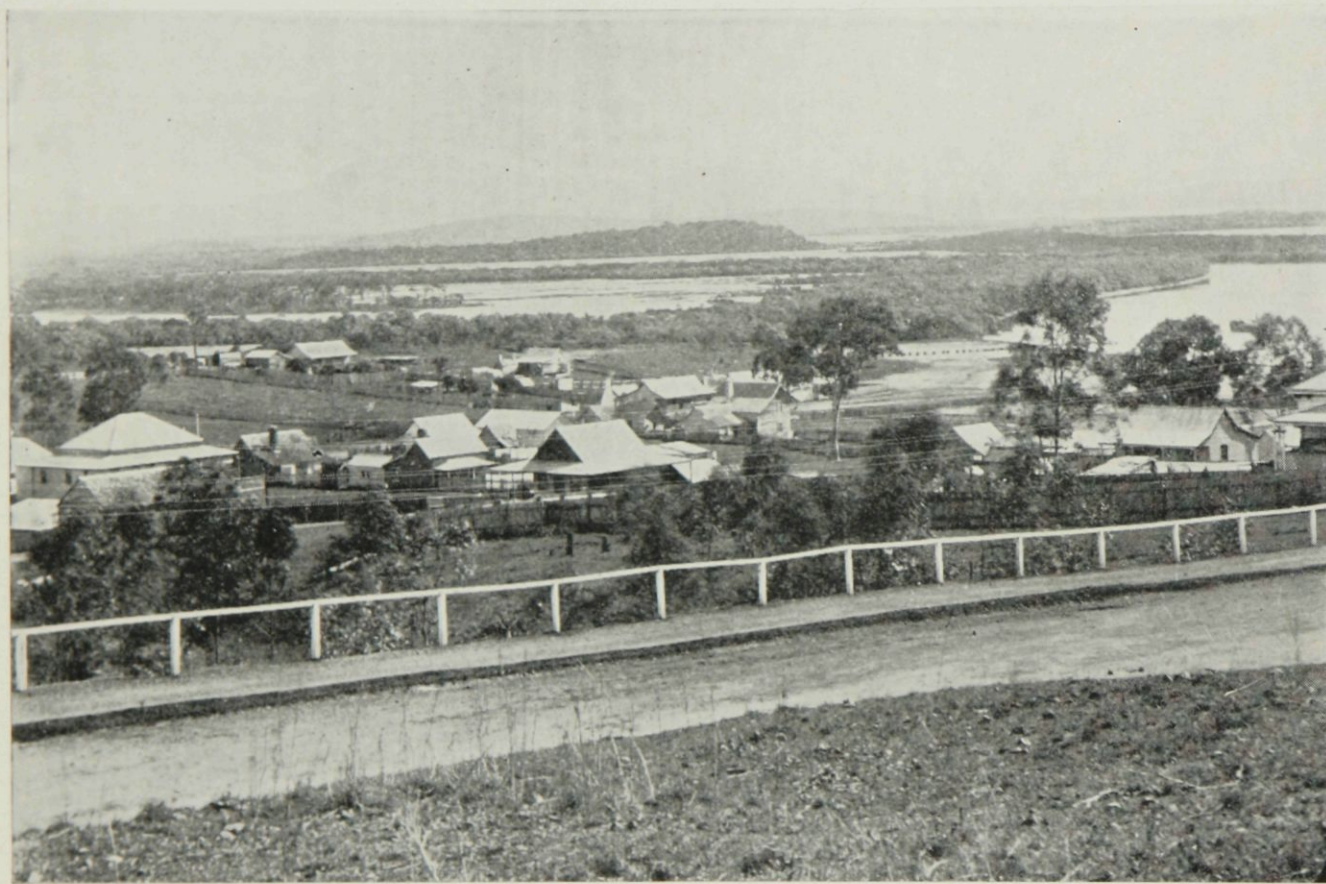


fruit, equally good; many sugar canes which grow to five and six palms and under; an infinity of palms; excellent dates and cocoanuts. Garden herbs are pumpkins, various beets, purslane, and beans. There is flesh of pigs (tame like ours), of goats, hens, capons, geese, partridges, turtle-doves, and pigeons. The natives speak of larger animals, understood to signify cattle or buffaloes.

The lapse of time which has been insufficient to cause the complete decay of a wrecked ship, or obliterate traces of a wooden building, has at least sufficed to sweep away every indication of white or yellow aborigines, of swine, domesticated or wild; of plantains, of hens, of geese, of date and cocoa-palms, of almonds, of strawberries, of sugar-canes, of oranges and lemons, of pumpkins, and of beans, indigenous to the locality. No natives use bows and arrows in the Australia of to-day. The coast line in the neighbourhood of Port Curtis now trends North and South, instead of East and West.

Yet, although the identification of Port Curtis and Keppel Bay with the regions visited by De Quiros, and by him named Australia del Espiritu Santo, thus appears questionable, and, indeed, has been

would have had to overcome, will judge that no amount of official coddling could have nursed it to maturity. The able and unlucky Lieut. Matthew Flinders, who discovered the harbour in 1802, and gave to it the name of the admiral at the Cape of Good Hope, Curtis, "who had been so attentive to our wants," had no high opinion of the land fringing it. Lieutenant Oxley, who visited the harbour and made a rapid exploration of the mainland adjoining in 1823, decisively reported that he did "not think that any convict establishment could be formed there that would return, either from the natural productions of the country or as arising from agricultural labor, any portion of the expense which would attend its first formation." Oxley had viewed probably a greater proportion of the Eastern regions of Australia than any man then living. Mr. Uniacke, a gentleman who accompanied him on this occasion and whose interesting narrative has been preserved to us in the publication of Mr. Barron Field, gave details more encouraging. A short expedition inland from the sea, and up the river then discovered and by Oxley named the Boyne, carried them through tracts where he noted soil "of the richest description and calculated to grow cotton, sugar, indigo, and all other Indian productions."



Gladstone, from near Auckland Point.

vigorously challenged, evidence of the wreck of some Spanish ships seems adequate, and the nice question of smithy or altar may be decided according to sentimental or religious preconceptions.

Barney's Point, a couple of miles south from the site of the present town, perpetuates the memory of the first British attempt to colonize this part of Australia. The history of that effort has found a narrator in Mr. J. F. Hogan, a native of New South Wales, and member of the House of Commons, whose book "The Gladstone Colony" gives a full account of its inception in the fertile mind of the great statesman who lent his countenance and his name to the enterprize and the place, but whose project was rendered abortive by the reversal of all his plans, while yet embryotic, by his successor in the office of Secretary of State for the Colonies, Earl Grey.

Our later generation, informed of all the difficulties which the plan of colonization by coastal settlement, with minor offenders and their families as the nucleus of a hoped-for self-sustaining population,

George Barney, Esq., Lieut.-Colonel, R.E., who had already spent some years in New South Wales, was, in London, appointed by Mr. Gladstone, on the 8th May, 1846, to carry out a plan of founding, somewhere on the North-Eastern Coast of Australia, a settlement on a new plan. British offenders whose breaches of the law were regarded as having proceeded less from criminal intent than from unfortunate circumstances were to be the pioneers, to be presently joined by their wives and families. These were to be reinforced by drafts of the better class of emancipists from Van Diemen's Land, where the labor market was glutted in consequence of the absence of any provision for reconveying to their native country ex-prisoners who had "served their sentences." Colonel Barney was accompanied from England by W. W. Billyard, Esq., a barrister appointed to be Chairman of Quarter Sessions, that is to say, in effect, Chief Judge, of the

proposed community. To Colonel Barney was entrusted the discretion of fixing upon a suitable locality. After a voyage of inspection from Sydney in the *Cornubia*, a little steamer of 94 tons, in the course of which Bustard Bay and Rodds Bay were visited, he fixed on Port Curtis, and on January 8, 1847, sailed from Sydney in the *Lord Auckland*, a sailing vessel, followed, a month later, by the *Thomas Lowry*. The *personnel* of the expedition was official. None of the intended settlers for the experiment of reformation had come to hand. Colonel Barney had his civil staff, a couple of detachments of the 99th Regiment, surveyors, and some artisans and mechanics.

The vessel in which he himself sailed ran on a shoal when entering the harbour, and bumped dangerously. His Honor the Superintendent and staff were already arrayed in full uniform for the ceremony of landing and the formality of inaugurating the establishment. But His Honor rather precipitately altered the programme, and the first boat to leave the endangered ship conveyed himself and family ashore. The vessel continuing to beat herself grievously, the rest of the



passengers next day were brought ashore to Settlement Point, Facing Island. One of the horses then landed broke away, was not recaptured, and was constantly seen by the lighthouse keepers at Gatcombe Head as late as 1877.

The ship's sheathing, the character of the harbour, and the reputation of the Colonel suffered about equally from the incident. After five days the ship lightened, floated off, was taken into Auckland Creek, which owes its name to the incident, and was hove down and repaired where the cattle wharf now stands. One of the old uprights still remains at the N. side of that wharf. The officials and stores were re-embarked, and landed at what is now known as Barney Point. A large building for headquarters was erected and a military camp formed. Three trees there found, marked by Flinders in the year 1802, were re-marked by Barney. But affairs went awry. Before the arrival of the Thomas Lowry the pioneers were in danger of starvation. Where it is affirmed De Quiros revelled in abundance of fruits, and in such garden-stuffs as pumpkins, beets, purslane, and beets, this famishing party could find no vegetables at all. Oxley had, a score of years earlier, found the mosquitoes terrible. So did Barney's party. Even after the arrival of the Thomas Lowry relieved the stress of famine, the condition of the people was miserable enough. Colonel Barney—probably waiting till the arrival of "exiles" should provide strong working parties—did practically nothing towards consolidating the settlement. The people lived in tents. Oxley had noted that bark for huts was not easily procurable in this neighbourhood. The official ration was scanty and not of high quality. There was rainy weather. The natives were treacherous. The first number of the *Government Gazette* of North Australia—a MS. sheet—concluded with a warning against allowing the blacks to enter the tents. A few days later three well-sinkers and a mason were approached, when at work, by a group of blacks, and an axe stolen. On following the robbers they were driven back by a pelting of stones, said to have been thrown from slings. The following day the aborigines appeared in force, armed with spears, threatening the locality where the men had been at work. Major de Winton, then lieutenant, has given recently in one of a series of papers communicated to the "Nines," the periodical of his old regiment the 99th, a vivid account of the affair. He commanded the detachment on board the Thomas Lowry:—"Hardly," he writes, "had we let go the anchor when a boat with two men put off from the shore, and the men informed us that they had been sent from Facing Island to sink for water on the mainland, but were in deadly fear of the natives, whom they had seen assembling in great numbers when they were at work. I said I would send a sergeant and a few men for their protection; but on their representation of the very large number of the natives and their hostile attitude, I thought it better to land in greater force, so, hastily getting together some tents, a cask of water, some ship's biscuits, and beef, I put off with twenty men, and took military possession of the spot, where is now situated the town named after Mr. Gladstone. Night had fallen when we had got the tent pitched, and as the Americans say 'fairly fixed up,' and having posted sentries, tired out, I lay down with the ground for a bed, a travelling valise for a pillow, and so to sleep.

"I was awakened by a conversation and a voice saying: 'Call the officer!' Rushing out, I found that a shower of spears had descended among us. All were quickly on the alert, and we could see dusky

forms moving amongst the trees in the neighbourhood of our camp. Judging it possible that we might be attacked in force, I ordered a few shots to be fired, upon which there was a stampede, and we were not, that night, further disturbed.

"In the morning I disembarked all the men,\* telling off some to pitch tents, and others to clear away trees and bush around, as we had brought saws and hatchets from the ships. This work, and scouring bush in light infantry order within a distance of a mile or so from the camp, filled up our first day's occupation. The object of scouring the bush was to show the blacks that we were in some force. Occasionally we saw dusky figures, but I would not allow any firing. Catching sight of a man—Paddy Long—raising his musket to fire at a black, I shouted to him to drop it, and told him that, for the first blackfellow he shot in cold blood, I would shoot him."

Affairs, however, had begun to shape themselves into better form. Water had at first been unprocurable, but the rains of February and March had filled watercourses and pools. A chance visit of two small vessels, timber laden, had enabled the superintendent to make a purchase and erect a rough store. The natives, finding the strangers inoffensive, had begun to pacifically visit their camp. A ship-load of Mr. Gladstone's "exiles" from Pentonville was overdue at Sydney. A small steamer, the Kangaroo, had there been secured for the use of

the settlement. She made her appearance on 10th April, but she brought peremptory orders from Earl Grey for the total abandonment of the settlement. The officials and troops accordingly withdrew. But the place was not long, if ever, entirely deserted. A few civilians lingered, or speedily came to make the place their home.

The relinquishment of Mr. Gladstone's project was hailed with great exultation in Sydney by the Anti-Transportation party. The scheme had been regarded, not unreasonably, as an attempt, by a disingenuous shuffle, to evade the pledge of the British Government that no more convicts should be sent to New South Wales. Mr. Robert Lowe, the future Lord Sher-

brooke, contributed to the *Atlas* newspaper of Sydney, from the musty files of which they have been brought again to light by Mr. Hogan, sundry rhymed satires, of poor quality, imitated from Pope, and aimed at Barney. They contain allusions which can but dimly be comprehended now—

How blessed the land where Barney's gentle sway  
Spontaneous felons joyfully obey;

Where thieves shall work at trades with none to buy,  
And stores unguarded pass unrifled by;

Strong in their new found rectitude of soul  
Tame without law, and good without control.

The sneer was unfortunate. No felons, "spontaneous" or compelled, ever set foot on the new settlement, but a number of privates of the gallant 99th did not "pass unrifled by the unguarded store" of Colonel Gray, a cask of wine belonging to whom was by them stolen and broached. The offence was discovered by one of the intoxicated soldiers tumbling into the sea and having to be rescued from drowning.

The actual landing is referred to in another piece which opens with unintentional truth with the line—

Here Barney landed—memorable spot,

\* Lieutenant de Winton had fifty soldiers under his command.



Manganese Mine, Auckland Point, Gladstone.



and both poems jeer at imaginary or forgotten eccentricities of engineering—

Bless'd land, what mighty works thy future hides!  
What zig-zag roads shall climb thy mountains' sides!  
Where travellers shall view with proud disdain  
The shorter path across the neighbouring plain!

The leaden intended satire is transmuted to-day by the alchemy of time into something very like the gold of prophetic truth. Already the sinuous tracks of a railway winding among the ridges convey from the South travellers who undoubtedly view with disdain "the shorter path across the neighbouring plain." References to aqueducts to bear the river's bed—

Free from the modern heresy of lead,  
and to—

Windmills in swamps, and water-wheels on high,  
may yet undergo similar transformation, but the allusion to a quay built "beneath the tide," and a basin scooped out "where no ship can ride," is more obscure.

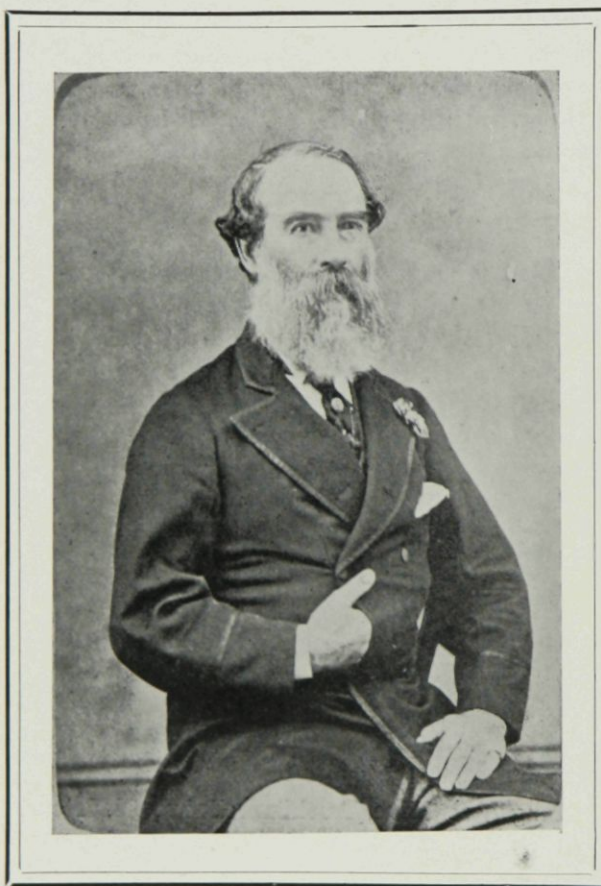
In 1854 the place received a fresh impulse, again governmental; but this time it was the Colonial and not the British Government which attempted to establish a colony. Perhaps no better illustration of the impotence of Governments to create self-supporting colonies by official procedure could be adduced than this of Gladstone. Barney was indeed allowed no sufficient time to develop his plans. But all he managed to accomplish pointed to failure. No better officer could have been selected for the task than the late Sir Maurice O'Connell. A soldier, who had won distinction in commanding an Irish regiment in the Carlist war: a native of N. S. Wales, where his father had also commanded a regiment, and had married a daughter of the famous Bligh, he returned to his native land with the 28th Regiment, and, selling out on its recall, settled in the country. He gained experience industrially as a squatter and politically as a member of the old nominee Legislative Council, resigning his seat to accept appointment as Commissioner of Crown lands for the Burnett district. This was the so-called "settled" district nearest to Port Curtis—when, in 1853, Colonel O'Connell was appointed to be the first colonial Government Resident at Gladstone. The character and qualities of Sir Maurice afford subject for

for interest to the philosophers of the modern school of belief in heredity of disposition. Descended on the paternal side from the family of which Daniel O'Connell, the powerfully endowed Irish political apostle, was an eminent individual, and on the maternal side from the famous Captain Bligh, of Bounty mutiny and New South Wales military insurrection notoriety, Maurice O'Connell in no obvious way resembled either. A brave and enterprising soldier, he rose in the service of Isabella of Spain to the rank of General of Brigade, and thrice won the accolade. Knight of three Spanish orders, veteran soldier while yet a young man, Colonial Councillor Colonel O'Connell was as little affected by the instincts of the Irish attorney as by the objectionable qualities of Bligh, that obscurely nurtured bully of the quarter-deck and of Government House, who was also the admirable hero of the most remarkable boat voyage in naval annals. Genial without efflorescence, dignified without haughtiness, high spirited, nicely honourable, he lived and died surrounded by the respect, esteem, and almost affection, of multitudes of colonists whom he never personally knew.

Colonel O'Connell sailed from Sydney on March 1st, 1854, accompanied by Mrs. (now Lady) O'Connell, Captain Prout, Mr. Riddell, Mr. Moore, Mr. Sheppard, and 52 in the steerage. For some reason not now apparent he established himself at Barney Point, a jutting headland of less elevation than Auckland Point, a couple of miles further north in the harbor. Barney Point is no longer, in 1900, inhabited. Traces of O'Connell's buildings remain, and some lonely graves marked by tombstones, "with rustic sculpture dressed." Of these lonely memorials, one indicates the resting-place of the Mr. Riddell whose name appears in the list of the Colonel's fellow-passengers. No romance attaches to the early death of this youth. He lost his life by one of those simple accidents illustrative of the homely occupations which fall to the lot of pioneers, without consideration of social standing. Water had to be conveyed to the settlement from a creek at some little distance. Young Riddell was killed, at the age of 22, off one of the water-carts.

His epitaph has a certain quaintness by the particularity with which it specifies that he was the offspring not only of his father, but of his father's wife:—

Underneath this Stone  
Are deposited the Remains  
of  
THOMAS MILLER STRATFORD RIDDELL,  
Eldest Son  
of  
The Acting Colonial Secretary of New South Wales,  
And Mrs. Riddell.



THE LATE SIR MAURICE O'CONNELL, K.C.M.G.

and recovered some bones, which were all that remained of the body of the ex-lieutenant. It is over these fragments that the tombstone was placed after they had been interred with all the pomp of a naval funeral. Beside these lie also, according to Mr. Friend's recollection, the bodies of a woman and two children, unmarked by any stone and their names forgotten.

It is worth noting here, as illustrative of the narrow tribal limitations of the Australian blacks, the fate of the aboriginal prisoners of the Torch. They were conveyed to Sydney for trial. No direct evidence being available to identify them as the actual murderers of Lestrangle, the Torch conveyed them back, to be relanded on their islands; but when the ship approached the shore in Port Curtis, the prisoners slipped overboard in the night and escaped to the mainland. Being encountered by the Port Curtis tribe, near Mount Larcombe, they were all massacred.

The portions of Queensland, and, indeed, of Australia generally, which were earliest occupied, are sprinkled with similar little cemeteries



and with solitary graves in spots whence living settlement has removed. Pioneers are the soldiers—the advanced guard and often the forlorn hope—of civilisation. Where they fall, generally, they are placed in the sweet bosom of mother earth. A whole household, surprised and slaughtered by aboriginals, rest in a little group by the ruins of the old head-station here and there. The murdered shepherd lies under a little mound close by the spot where once stood his lonely hut. Every station has its enclosure for burials. Mining camps, once the centre of bustle and enterprise, but long abandoned, have left, in numerous localities now unvisited and never easily accessible, few indications that they existed save the decaying palings which still

it fell out. New South Wales preserved the basins of the Clarence and Richmond and Tweed. The boundary started from Point Danger. Brisbane, in a corner, was made the capital of the new colony, and the wise provision which had suggested that Gladstone should be the seat of government was overborne. The seeds were then sown of future contentions between the Southern and Northern portions of the new colony for a further subdivision and yet another colony, now perhaps permanently allayed by the Federation of all Australia.

But when O'Connell was appointed Government Resident at Gladstone, the presumption that there the future metropolis of the expected new colony would be established was regarded as little less than certain to be realised. A township had been surveyed before the appointment of Colonel O'Connell as Government Resident, and a few weeks before he sailed to assume, on the spot, the duties of his office, the first land sale was held at the Treasury, Sydney, on the 8th and 9th February, 1854. The great expectations which at the time attached themselves in splendour to the place, which never entirely abandoned it, and which to-day have begun to glow with renascent gleams, induced daring competition for the lots offered at auction.

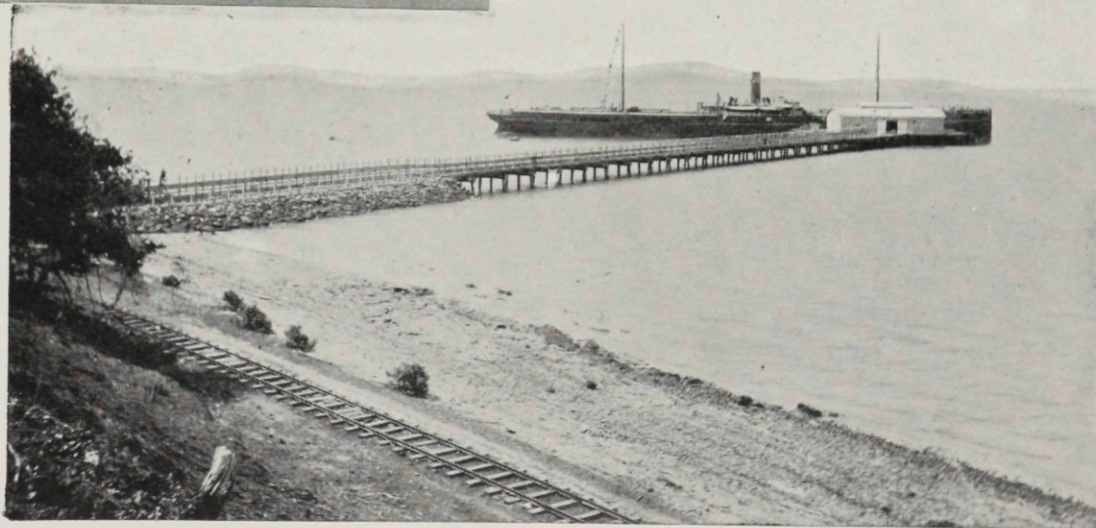
Twenty-one town allotments, situate on the ridge which is a sort of neck leading to the wisely reserved headland of Auckland Point, were disposed of. The reserve upset price was £20 per



The Boyne River, near Gladstone.

surround a few graves. Could the life stories of those whose mortal relics thus mingle with the soil be learned, there would be much to surprise and interest. Under the litter of dead leaves and wind-blown raffle rest men whose fathers and brothers have tombs emblazoned with all that "the boast of heraldry, the pomp of pow'r," can contribute to preserve the memory of race and station.

One of the motives which induced the Government of New South Wales to revive officially the Port Curtis Settlement was a desire to establish there the nucleus of a capital for the new colony to be sliced off the north of N. S. Wales. That such a severance had become inevitable was recognised. Brisbane, as the oldest and most considerable town, was pushing claims to be the capital. N. S. Wales politicians apprehended that if Brisbane were to be the capital the line of separation would be drawn considerably nearer Sydney than would be the case if a situation more to the north were fixed for the future metropolis. If Brisbane were recognised as the northern capital, the desire of the settlers on the Clarence to be included in the new colony would be strongly supported by topographical reasonings. It was plainly an absurd proposal to adjust matters in such fashion that the political centre should lie but about three degrees of latitude from the southern boundary and some eleven or twelve from the northern extremity of the proposed State. Yet so



Gladstone Jetty.

acre. The average realized was £318 per acre. Mr. Danker, now a resident of Rockhampton, writing from memory a few years ago, asserts that one lot of a quarter acre fetched £1,400. Suburban lands to the extent of 215 acres were also sold. Their upset price was from £2 to £2 10s. per acre. The average paid for them was about £9 per acre. The map of Gladstone still carries the names inscribed, in the different lots, of the original investors, and these sufficiently indicate the class of people who expected a rapid and considerable development of the town and port.

Of prominent politicians there are two; one a future Chief Justice, and both destined to be Prime Ministers of the mother colony,



Sir James Martin and the Hon. William Forster, both long since deceased. The head of the Roman Catholic Church in Australia, the late Archbishop Polding, was another investor. Remarkable, indeed, have constantly been the foresight and generally the judgment with which the guiding authorities of that Church have in all parts of Australia possessed themselves of the most excellent sites for cathedrals, churches, convents, and colleges. Hebrew speculators likewise, always provided with ready cash, were prominent among the speculators. The names of Moses, Mendellsohn, and Cohen appear thickly on the map.

But, as already stated, the expectations of the men of the time were doomed to be disappointed. Governor Fitzroy, sailing from Sydney in H.M.S. Calliope a few days later than Colonel O'Connell, and visiting Brisbane, *en voyage*, arrived at Gladstone shortly after the Government Resident, gave the name of the warship to one of the small rivers which discharge their waters into the bay, and on his return to Sydney embodied in his speech at the next opening of a session of Parliament an encouraging reference to the prospects of the place.



Native Police.

On the 1st April, 1854, just one month after Colonel O'Connell had sailed from Sydney to reoccupy, as Government Resident, the Gladstone settlement, a Dutch ship, the *Hester*, of 900 tons—a very big ship in those days—quitted the same port, in ballast, bound for Batavia. When a point some 300 or 400 miles E.N.E. of Keppel Bay had been reached, the *Hester* struck upon Keen's reef. Her bows were fast. Over her stern no soundings could be obtained. Her hold was full of water. The officers and crew took to the long boat. Almost all the provisions were inaccessible. The water casks were in the hold, the stores in the lazarette, all awash. All the shipwrecked men, 18 in number, could secure was the water in the deck scuttle-butt, and the salt meat in the harness-cask, in addition to a couple of cans of soup-and-bouilli from the steward's pantry. After eight days of misery, latterly without food or water, the castaways reached Keppel Bay. Among them were two sailors shipped in Sydney to replace runaways, and who had been diggers on Omeo Creek, N. S. Wales. One of these was William Gibson,

who, after many years of successful seafaring life—a master mariner—settled down to enjoy his ease at Hebden Bridge, England, but felt impelled, in 1900, to revisit the scene of the adventure of his youth. From his lips the foregoing introduction, and the narrative which follows, worth preserving as illustrative of some early aspects of colonial life, were noted down. The two ex-diggers, on the boat reaching land, vainly sought for water. The unfortunates then turned their boat's prow southward, through the placid waters of "The Narrows," which separate Curtis Island from the mainland. As evening fell they approached the present site of Gladstone, and, rowing slowly in the last stages of exhaustion, opened into sight, nearly where the jetty now projects from Auckland Point, a bark hut. Horses were grazing beside it. Electrified by the un hoped-for indications of European settlement, the weary men rushed to the oars, and, "double-banking," pulled with such energy that they immediately snapped one, which a few moments before they scarce had strength to drag listlessly through the water. They displayed their ensign. Before they reached the Point, however, they were startled to see a bustle of

preparation to resist their landing. Uniformed men, marshalled by an officer, and handling carbine and sabre, ranged themselves in military array. A brief parley, however, explained the menacing reception. Great Britain was at war with Russia. The Dutch flag seen in the twilight had a doubtful resemblance to the Muscovite colors. Hostile cruisers were not unexpected. Lieut. Murray and his detachment of Native Troopers represented, in that advanced outpost of the British colonial territory, the military force of the far-reaching Empire. They were in all seriousness so regarded. A few months later, Colonel O'Connell, officially reporting relative to a difficulty which had occurred with the troopers, stated that he had caused the men to be paraded, and—

"Putting on my uniform I rode over to the native police quarters to try what effect an appeal to the men, on the part of Government, would have upon them. . . . I appealed to their pride of manhood, explaining to them that the country they had served so well for the last five years was now at war with other white people, and that their services might be required as soldiers to defend the coast upon which they were stationed, and, showing them by my uniform that I too had been a soldier, I told them

that in the event of an enemy landing I depended upon the native police as the only force at my disposal for means of repelling him."

Once satisfied that the approaching boat was not carrying a Russian detachment, Lieutenant Murray received the almost perishing men with humanity. There was a little store at hand, kept by one Allport, and there he procured for each man refreshments. A bottle of ale each dwells in Captain Gibson's recollection.

After a few days, Colonel O'Connell invited the two English digger-seamen to join a survey party whom he had detached to explore the country towards the Fitzroy River. The two diggers had been struck with the auriferous look of the country near the settlement, and put in a little time in prospecting up Auckland Creek, getting "colors" of gold everywhere. The survey-party was shorthanded. Two of the men had been speared by the blacks, and one had been drowned. But Gibson's desire was not for fresh adventures. He was anxious to resume his voyage to the old country. He and his companion—also a



successful digger in N.S.W.—had some quantity of gold; a fact which they kept prudently secret. Colonel O'Connell wished to retain them. Mr. Gibson to-day remains sore about the Government Resident's methods. The officers and crew of the Dutch ship were con-

Considering himself now sufficiently acquainted with the track, Gibson undertook to return and from the Burnett to make his way to Maryborough, whence there was frequent communication by sea with Sydney. Accordingly with his digger mate—a strapping English sailor—a Euro-Mongol, native of Hongkong, and a “black boy” (tame aboriginal), he set out, on foot. He bought a gun from one of the military pensioners brought to Gladstone by Colonel O'Connell, and disregarding warnings that it was a very different matter travelling on foot from a journey on horseback, and that he would never be heard of again, as the blacks would dispose of him, he plunged into the wilderness.



The Wild Bush.

veyed to Sydney in the Tom Tough while Gibson and his mates were away in the bush, believing, from what they had been assured, that the Tom Tough was not to be despatched. Determined now to make his way South, Gibson joined a butcher, who was starting for Gayndah to fetch cattle for killing. Colonel O'Connell's private stock had been driven from his former headquarters as Crown Lands Commissioner of the Burnett District by this route, and the line blazed. Blazing is chipping a small slab of bark from trees at intervals, and is rapidly done by a horseman with a tomahawk. At first the white sap-wood of the tree, so bared, stares the traveller in the face, and is visible at a considerable distance. After a while, however, it tones down, and is not easily perceived. Gibson and the butcher, however, reached a station on the Burnett, and with a mob of cattle made their way back. The difficulties attendant on the establishment of relations between white men and the aborigines may be partially understood by contrasting two encounters. When a few months earlier two of Colonel O'Connell's orderlies were driving his horses and cattle by this route, and came suddenly in contact with a large party of natives, the latter, instead of showing any hostility, pointed out the most direct line, and helped to drive the stock, even coming into the camp at Gladstone, and remaining there for some days. Under identical circumstances, Gibson and his party encountered probably the same tribe, a day's journey from Gladstone. Night was falling. The white men, tethering their horses, so as to be handy at need, discussed the situation. The blacks had camped not far off. An attack next day was apprehended. The travellers decided to anticipate it. At dawn they mounted, and riding up to the blacks' encampment were received with yells and dancing. At 30 or 40 yards' distance the whites fired on them, their pieces being loaded with buckshot. To their intense relief the aborigines instantly bolted.

The big sailor-man proved a poor pedestrian, and soon got footsore and quite crippled, which retarded the progress of the party. Their meat went bad. Their flour was nearly finished. What remained they made one baking of, for greater ease in carrying. Their black boy, a native of a more settled district to the south, was still going strong and volunteered to carry the provisions. He was even anxious to relieve Gibson of the burden of his gun. But this was an excess of zeal which the alert little sailor did not appreciate. Mr. Gibson, when in 1900 he revisited Gladstone to review the scene of his adventures, was still, although a greybeard, a brisk and energetic man. The black-fellow kept well ahead, so well ahead in fact that the others never overtook him nor saw him again. Thus left without a scrap of food,



A Jungle of Ferns.

and two days' journey ahead of them, their situation became perilous. Gibson suggested to the big Englishman that he, being crippled, should remain where he was, while the other two pushed on and procured horses and relief to recover him. The distressed man begged that he



might not be abandoned, and, while he pleaded, the half-Chinese devil kept muttering in Gibson's ear, "Shoot him! Shoot him!" This prompting settled the matter. Gibson decided not to part from his white companion. The two days' journey lengthened out into five. But they reached a station when almost at the last extremity, and met with the relief and hospitality invariable among frontier pioneers.

Indications of the presence of gold had been seen in the vicinity of Gladstone, even before Gibson found fair prospects up Auckland Creek, at Stowe, at Baiane, on the Calliope, and in the direction of Mt. Larcombe. Governor Sir Chas. Fitzroy had been shown some of the metal during his visit to the place, and had instructed Colonel O'Connell to make every effort to find a payable field. It was not till 1858, however, that anything really substantial was hit upon. In February of that year Mr. Chapel, an experienced digger, was charged with a mission to prospect the country on the Fitzroy River. With a small party, Chapel endured the usual hardships of pioneering, but with brilliant results. He sent in word that he had discovered what he sought, and Dr. Robertson, Government Resident Surgeon at Gladstone, who had had experience on the Californian diggings, was despatched to inspect and report. He returned, accompanied by Chapel, and bringing parcels of alluvial gold, mostly won by simple dish-washing. An excited meeting of residents of the not too prosperous little township was held, and Chapel discoursed. He talked of the geological formation of the district. He had found gold at Canoona and at Calliope. Also he expected it would be found throughout the broken country between the Boyne and the Dawson Rivers. Anyhow he was prepared, as a beginning, to lead the way to a locality where he had proved that any man able to work could earn a pound sterling daily with the pick, shovel, and dish.

He had no doubt the place would, when adequately tested, prove as rich as any hitherto discovered in Australia. Looking back, after nearly half a century, it is clear now that Chapel's facts were solid. Only his expectation was over-sanguine. To predict another Ballarat was a heavy draft on probabilities. The immediate consequence of the report by Dr. Robertson and Mr. Chapel was, of course, an exodus from Gladstone of all who had aught to seek from fortune. The Government Resident's boats' crews went off. All his constables left him save two. The first rushers found, generally, that the gold was there. Accounts from them were endorsements of Chapel's reports. Colonel O'Connell, in pursuance of his duty, officially reported the

success of the diggers. Private communications from individuals to their friends in the South fanned the flame, and soon all Australia was in conflagration about the El Dorado of the North. The story of what was at first called the Port Curtis and later known as the Canoona Rush has so often been told at length that a brief *resumé* will suffice later on.

First, the towns and stations in Queensland further South were emptied of a large proportion of inhabitants. These people were passing through Gladstone in hundreds. But shipowners and steamship

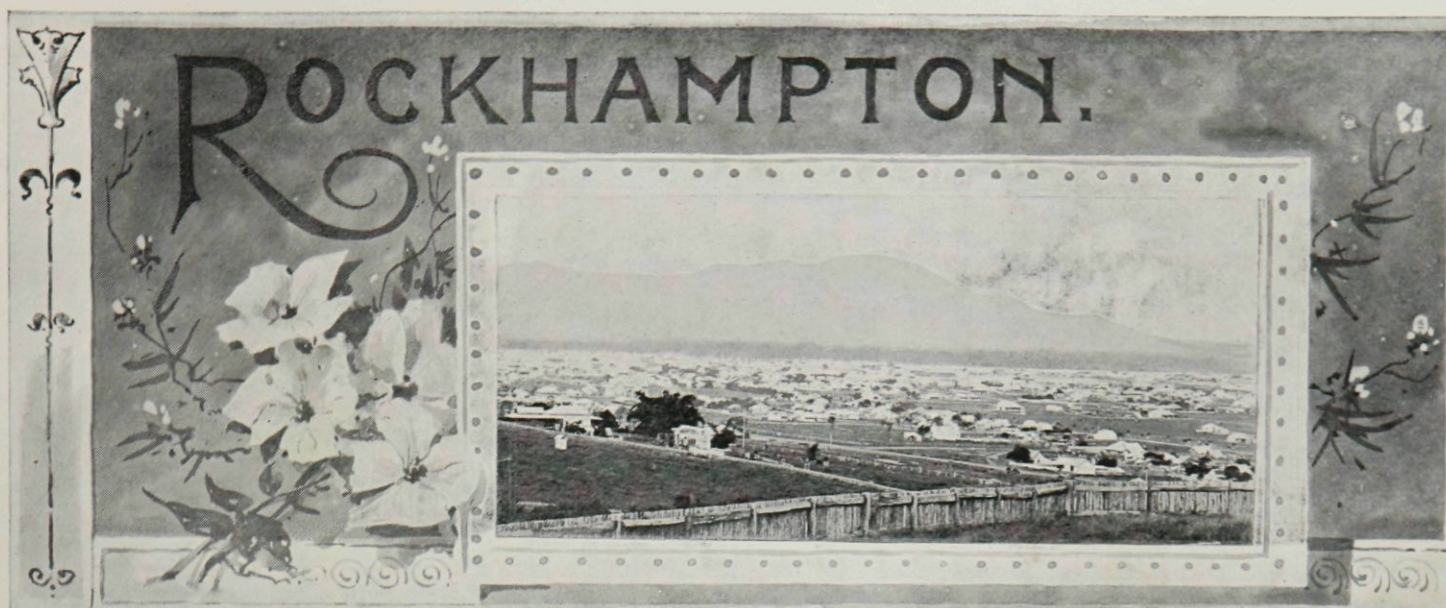


A Bush Road.

companies early ascertained that Gladstone was not the nearest point for debarkation for the actual goldfield. The local storekeepers who started branch establishments on the field had no notion of hauling their goods, ordered in Sydney, overland from Gladstone. The Fitzroy River flowed close by Canoona. Up the tortuous channel which shoals and sandbanks left for vessels of burden in that imposing stream, steamers and sailing vessels cautiously plumed their way to a point 30 miles from the mouth, where a bar of rocks terminated the navigation except for small craft. Here on the south bank they discharged their cargoes and their swarming passengers, and thus were laid the foundations of the thenceforth important and progressive town of







**A** **SITE** thus determined alone by accessibility by water is apt to be defective in other respects. No one would choose the earliest settled positions, for example, of New York, or even of San Francisco for residential purposes. The main portion of Rockhampton is planted on a high river bank, or "levee," as it would be termed in the United States.

Here a fine street, open to the river, and flanked with some good buildings such as the Criterion Hotel and the Rockhampton Club, affords an airy promenade in the evenings. Back from the river the country dips. The principal street for retail business, East street, and indeed all the town, lies where once was a forest-flat, pitted with which are termed "crab holes," and subject to partial inundation by the overflow of the Fitzroy during heavy floods. A range of hills, named by the Archers the Bersarker Range, intercepts the sea breeze, which otherwise would modify the summer heat. But at the back of the town rises ridges which do catch the marine air, and in which have been built villas of the wealthier citizens and public institutions such as hospital and grammar schools for boys and for girls.

It is not, however, in a provincial town of a young colony that luxury and elegance can reasonably be looked for. Rockhampton has not yet attained the stage of wood-blocked streets and electric trams. Its population have to be content to reside within walking distance of the place of their daily labours. A home of their own is the extent of their first ambitions. A bit of land and a plainly designed wooden cottage are the first achievements of self-denial and economy. A stage later there are little indulgences of taste, qualified by utility. The cot grows by additions. Its first crude outlines are broken by a wing thrown out here and a bit of verandah there. A bay window, a streak of moulded woodwork, a trellis, a vine or evergreen creeper, soften and embellish. It is surprising how much grace can be imparted by inexpensive trifles. Of two cottages, standing in adjacent lots, and built line for line on the same model, one will be staringly mean, and the other, embowered in a few umbrageous trees, porched with a few shillings' worth of wooden trellis over which spreads a massing creeper; a bed of flowers and a patch of sward replacing the bare yard of its neighbour, presents

the attractions of a modest home. Such a cot looks cool, and has a degree of privacy, which the other utterly lacks.

Rockhampton is a prosperous and bustling town, however. Among its residents there is but a small proportion of wealthy people. But the proportion of actually poor is just as small. The main business street exhibits shop-fronts which would be handsome in Bond street, and would brighten up the dingy Strand, in the world's metropolis. There are substantial merchants—importers and distributors of the manufactured goods of Europe and America. There are well-to-do tradesmen. Half-a-dozen banking companies have branches here.

Such industries as can exist by ordinary demand for quick supply, or under the protecting influence of the heavy revenue Customs tariff imposed on importations, have taken root. An iron bridge of light and not inelegant designs has been built across the Fitzroy to provide access for vehicular traffic and foot passengers to and from the suburb of North Rockhampton, and a little higher up another bridge spans the stream, carrying the line of railway which connects the town with the well-known meat works at Lake's Creek and with the seaside resort at Emu Park. There, in the summer months, the wealthier resort to marine villas, and the population in general are enabled, by availing themselves of cheap excursion fares, to enjoy the cooling breezes of the ocean, bathing, strolls on a noble beach, and to rejoice their eyes with a very lovely scape sea and land, the monotony of an infinite horizon being prevented by the interposition of a scattering of islands. A few miles further north, but not connected by rail, lies, also on the ocean frontage, the village and settlement of Yeppoon, where plantations and a mill mark activity in sugar-growing and manufacture, and close to which is situated the property known as Tarangaba, the scene of an alleged gold industry which was to have given Mount Morgan a rival, but merely resulted in the plunder of some and the ruin of several prominent men in New South Wales. This neighbourhood is nevertheless distinctly mineralised, forming practically an extension of the Cawarral Gold Field, and at Mulambin, a property adjoining Tarangaba, exists a mass of iron-oxide, forming



low cliffs which border and indeed descend and run into the ocean, and seem to indicate some correspondingly extensive occurrence of metal underneath this cap of "gozzan."

To return to Rockhampton, however, the municipal authorities have already done something towards alleviating the disadvantages which the flatness of its site and the monotonous regularity of its grid-iron plan impose upon it. Some tree-planting already tempers the rigidity of the wide streets between the river and the ridge. A Botanic Garden, bordering on the river, has already some beauties, and the commencements of many sylvan delights. The municipality of Rockhampton contains 26 miles of streets and roads, and the town, N. and S. of the Fitzroy, has a population of quite 20,000 inhabitants, with an aggregate property valued for municipal rating at more than £1,200,000.

#### THE CANOONA RUSH.

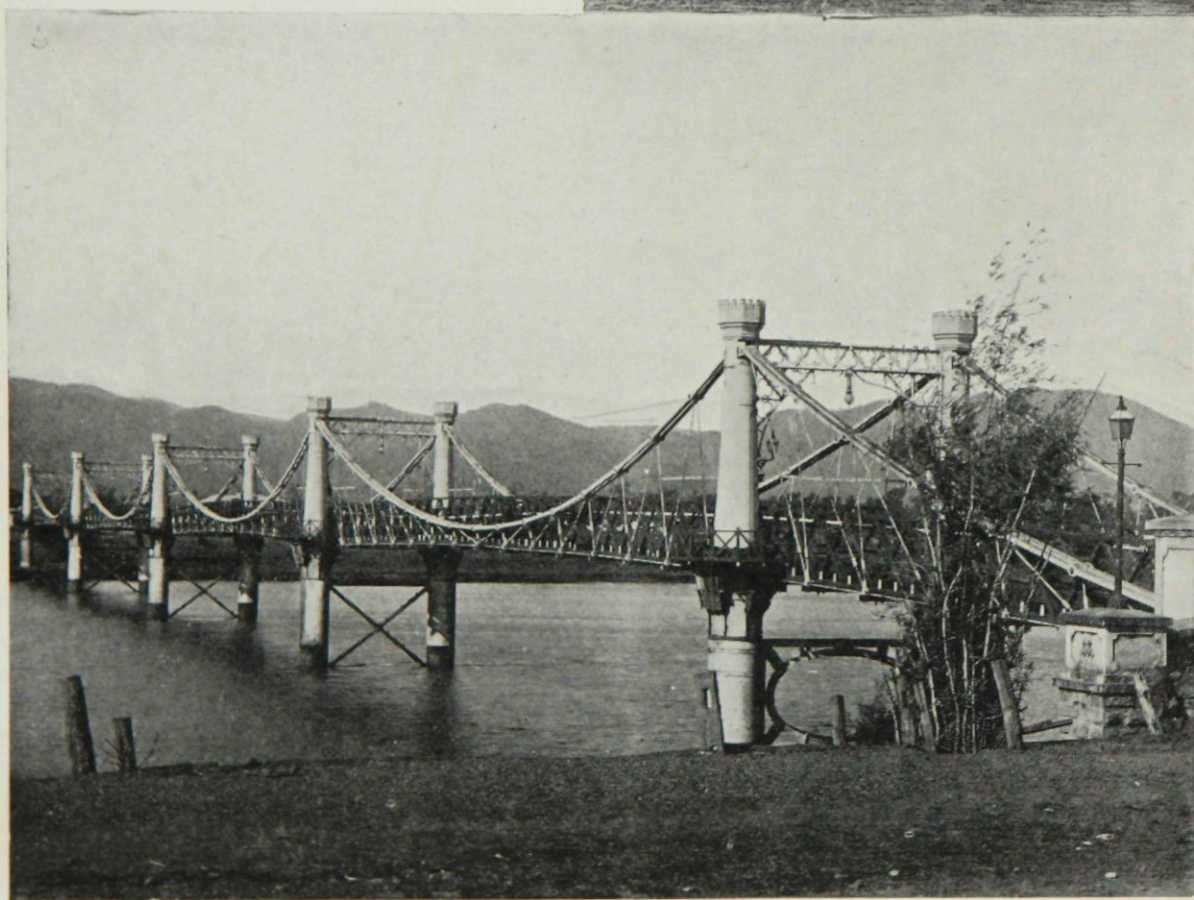
It is still interesting to contrast the early aspects of particular localities with their present appearance. Fifty years hence some one may institute similar comparisons. A few years ago Mr. Danker, one of the Archers' employees on Gracemere Run, contributed to one of the Rockhampton papers a chapter of his experiences. Mr. Charles

stream, in the vicinage of the big meat-preserving works, at Lake's Creek, they often make their appearance. Yet the boys bathe and swim in the river, and no tragedy has happened. It was by the Yaamba ford that the gold seekers made their way to Canoona, the scene of the great gold rush, about 50 miles up river.

In some respects the Canoona rush differed from any other rush which has taken place in Australia. The locality where gold was found was exceedingly remote from any centre of population. There were



East Street, Rockhampton.



Fitzroy Bridge.

Archer, he stated, predicted that an important town would spring up, and indicated the place where Rockhampton now stands. The bar of rocks interrupting navigation probably gave him his cue. All was bush and swampy crab-holes where now Fitzroy street extends. There was a gap down the river bank to where in East street the court house now stands. In that gully Danker first saw an alligator. These reptiles, it may be remarked, have not been extirpated. They are occasionally seen up stream as far as Yaamba, where the river is fordable and all the traffic for the North used to pass. Also down

no means of conveyance at first; no roads, no shipping, no near base of supplies, no place to retreat to. Moreover, the seat of Government was at Sydney, nearly 1,000 miles away. Captain O'Connell came over with a handful of orderlies to represent the power of law and order. The diggings proved inadequate to support more than the first few hundred men who reached them. Captain Hunter, another pioneer who, of late years, jotted down his recollections, which, published in the *Rockhampton Bulletin*, have been saved from being lost in the back files of that journal, by preservation in a scrap-book of clippings, by Mr. Coase, a resident of Gladstone, states that the patch of really rich alluvial did not exceed in area a couple of acres. At the height of the rush

there were, it is said, 15,000 men seeking for gold. Even before the flood of adventurous, and mostly needy, humanity from the South poured over the land, when indeed there were but a few hundreds on the diggings, disillusion had begun among them, starvation stared some in the face, and irritation prompted them to violence. When the numbers increased the situation became exceedingly dangerous.

The official staff indeed had been augmented, and the handful of police reinforced by the arrival of several constables from Sydney, under the charge of Sergeant Griffin, a man whose name was destined



in later years to be heard all over Australia in connection with a frightful crime. Mr. Cloote, a gentleman of Dutch descent, son of the then owner of the famous Constantia Vineyard at the Cape of Good Hope, was Gold Commissioner, to whom Mr. Wiseman later succeeded. There was a proportion of ex-convicts among the rushers from the south, the usual percentage of reckless men sustained by crime, and a stratum of steady men who valued order and felt the importance of upholding established authority. The scenes which followed on the inadequacy of the golden area to maintain the immense body of adventurers becoming apparent, were dramatic, and only the resolute behaviour of the officials and the good sense of a proportion of the diggers saved them from being tragic. Captain Hunter narrates an incident illustrative of the nerve and good sense evinced by Commissioner Cloote, in the discharge of his very difficult duties.

Chapel, the original prospector of the field, was not, according to Captain Hunter, the sort of man to hide his light under a bushel. Very early a rough public-house had been erected on the river bank, where the fine building of the Criterion Hotel now overlooks the stream and the bridge which spans it and gives communication with the suburb, North Rockhampton.

Mr. Palmer, one of the early storekeepers of Gladstone, had transferred his business to premises run up where Walter Reed and Co. now have their establishment. The "Bush Inn," as the public-house was named, was a rendezvous for new arrivals, an emporium for grog and gossip, and there Mr. Chapel was wont to hold his court, so to speak, the red-shirted oracle of the diggings. But a little later he was seen in another rôle altogether. On the field itself, disappointed men loafed listlessly about, angry, often hungry, probably also thirsty, or, still worse, with a recently-quenched thirst, ready for any excitement. A turmoil, a clang of angry voices, of loud protestations, of warnings, of furious denunciations; a seething crowd, hustling a struggling wretch in their midst. Commissioner Cloote rides up. The man in the centre is Chapel, livid with terror. There is a rope round his neck. The crowd is whirling and shifting vaguely as crowds are wont to do. But there is an impulse from within. Its general direction is towards a tree.

"What," demanded Mr. Commissioner Cloote, "what are you going to do with that man?"

"Going to lynch him!" "Lynch him!" "Hang him!" rejoin many voices.

"Indeed! What for?" The Commissioner begins already to master the situation. He particularly addresses himself to two or three of the most prompt to reply, and most energetic in action. The active and bustling gentleman, who has hold of the noose end of the rope, is particularly favoured with the official conversation, and fixed by the official eye.

"Why; well"—this time the reply is somewhat disjointed, and comes, fragmentarily, chiefly from interlocutors advantageously situated behind the Commissioner's back—"the —— had deceived them. He had enticed them here on false pretences. False pretences that there was a diggings here."

"Well," thus the official, who had by this time got the energetic gentlemen at the head of affairs into rather an uncomfortable frame of mind by the obvious—exceedingly obvious—interest he had been showing in their personal appearance and every feature; "well," addressing suddenly and sharply the two who had distinguished themselves by particular handiness with the rope, "Take that rope off his neck." This command was obeyed with remarkable alacrity; the individuals who had been officiating brilliantly prior to his intervention resigning their distinguished positions—slinking into private station in the thick of the now wavering crowd.

"Now," continued the Commissioner, quietly effecting a flank movement which placed Chapel in the midst of the constables. Now, you tell me you've been brought here by false pretences that there's a gold diggings. Have you tried whether there's a diggings?" There is reason from this challenge to suspect that Mr. Cloote had perceived the mob to be constituted largely of new arrivals, who had never broken ground at all. Their tools, perhaps, told him. Anyhow, he either knew something of the ground he stood on, or took a big risk, perhaps to gain time.

"Some of you diggers have picks and shovels. Just dig where you stand, and let us see what you get."

They dug. They washed out a pan of dirt. The result, as it happened, showed nearly a half ounce of gold to the dish!

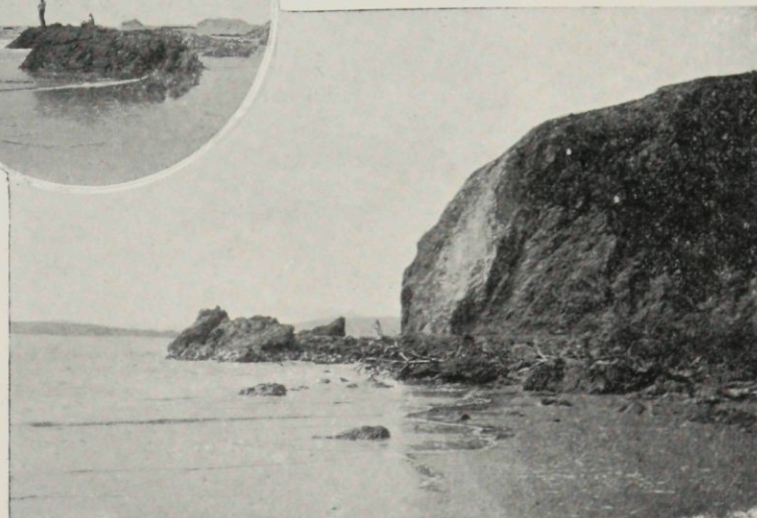
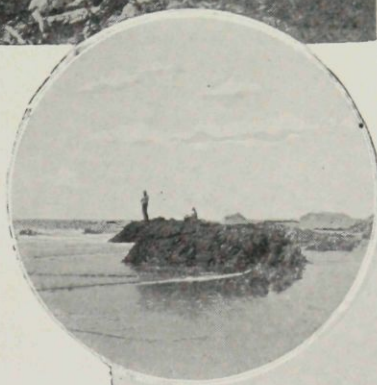
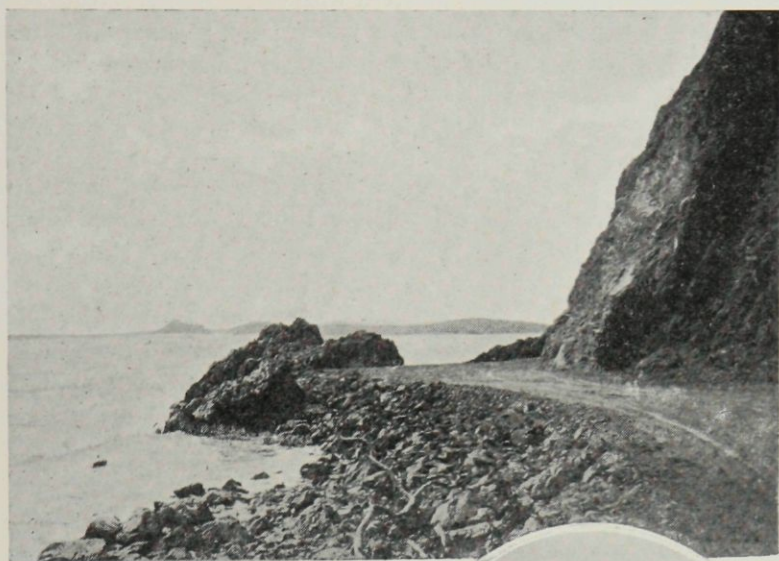
The commissioner administered a severe reproof, and warned them not to let him see any more of "this sort of folly."

And, remarks Captain Hunter, Chapel "blew" no more. Here we may take leave of that prospector. A plucky and enterprising fellow he must have been,

for in his search for payable gold in the wild country from Port Curtis to the other side of the Fitzroy he must have carried his life in his hand all the while.

It is stated by James Wanmer, once a New South Wales police trooper quartered in Gladstone, who, with Tevrick and O'Brien, orderlies, in August, 1858, accompanied Colonel O'Connell, *viâ* Raglan and Mount Larcombe Stations, to the rush, that Chapel was killed by the blacks when prospecting on the Callide or Kroombit watershed, west of the Dawes range from Gladstone. Where his remains lie, probably no man knows to-day. Probably a long, narrow mound once showed pretty nearly where his body was found and buried, but to-day could not be distinguished amidst the natural irregularities of the earth's surface.

Another incident narrated by Captain Hunter is remarkable. In the earlier days of the rush, when only about 300 men were on the



Yeppoon.



ground, a party who had unsuccessfully sought payable gold were sitting and lying about, discussing their situation and cursing their luck. The d—d place, they agreed, didn't *look* like a goldfield. One of them, as he talked, was mechanically stabbing his knife into the ground where he sat, leaning against a tree. Suddenly it was noticed that the earth he turned up showed gold. Picks and shovels were at the work in an instant, and seventeen ounces of gold were won from among the roots of that tree. The grumbler was not silenced, however, by this good fortune. "There may be gold," he said, "but no goldfield."

There was not a single case of lynching on the field. Despite their disappointment, hardships, danger of starvation, and natural irritation, the general sense of the diggers was opposed to disorder and violence. One rowdy, summoning men to "roll-up" for a sort of general council, adopted a plan of giving a series of short speeches inciting his hearers to violence against Colonel O'Connell, concluding generally somewhat in this fashion: "If you're half men, you'll pull that ——— wretch out of his tent, and pitch him into the river. Only stand by me, and I'll do it quick." But Colonel O'Connell was not the sort of man to be intimidated. He attended the meeting, addressed the crowd, explained the steps that were being taken to afford relief, and was heartily cheered.

Captain Graham saw a mob dragging a man along, and immediately intercepted by a body of miners who, like Commissioner Cloote, demanded to know what their intentions were, and received the expected answer, "Lynch him!" "None of this sort of thing here. Clear out or there will be shooting. There's a magistrate down there. Take the man to him, and if there's anything to be done he'll do it." This, without a revolver being drawn out of its holster, was sufficient.

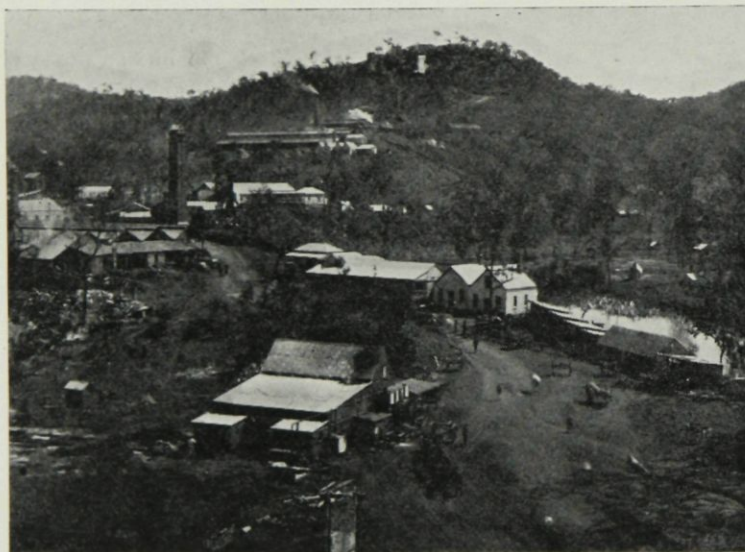
At Rockhampton, on the river banks, where the shipping was, affairs looked pretty serious as the throngs of camp-followers and disappointed men who had returned from the alleged diggings increased. Mr. Wiseman, a pioneer official in the early days on the Darling Downs, had been sent up as police magistrate. The popular complaint, that a policeman is never at hand when there is trouble, has been made respecting him at this juncture. Anyhow the storekeepers formed themselves into a Committee of Safety to assist the handful of police in case of need. They had landed and swung a big bell from one of the ships, and had 80 muskets ready in Captain Graham's tent.

But presently the stress abated. The Archers, on Gracemere Station, a few miles distant, pioneer squatters, moved thither not long before from the Burnett District, gave employment at fencing work and whatever else they could, to numbers, at 5s. per week and rations. The Governments of N. S. Wales and Victoria subsidised steamship companies to give free passage back to the South to all who sought that method of retreat. So the throng dwindled. But Rockhampton had been called into existence, and would not die. Even the repulsed army of diggers had not all unalloyed disfavour for the locality. Payable ground they could not hit on. But the experienced men were not convinced that the locality was hopelessly poor in the precious metals. Some had scattered pretty far afield, and had noted tantalizingly favourable indications in all directions. They were driven back, not so much by discouragement as by failure of their resources to continue the campaign. In fact, as later years have shown, they were reconnoitring localities rich beyond their most sanguine dreams in the very metal they sought. It is more than probable that some of their

scouting parties at least saw, from some ridge crest, the blunt top of a nameless hill protrude somewhat above other eminences, a hill now known throughout the civilised world as Mount Morgan, richest treasure mound of gold mankind has ever known. Again, on the north side of the river, the whole region is mineralised. Reefs of golden quartz, lodes of copper ore, seam the rocks here and there; and how many remain to be laid bare by the prospector yet to come no man can say.

The exodus of diggers leaves forlorn the business pioneers who have run up their store buildings, their public-houses, their blacksmiths' forges, and so forth, on that bank of the Fitzroy River, and back on that forest flat, pitted with melon-holes. Ruin seems to stare them in the face. Who now will freight steamers to thread their difficult way from Keppel Bay up that broad-bosomed but shoal-obstructed river, and to what end? Is Rockhampton to be but a transient name—scarcely a memory? Not so. There is movement inland.

There are great mobs of cattle, big flocks of sheep overlanding from the south. Those Peak Downs which Leichhardt discovered are being stocked by pioneer pastoralists. From the upper waters of the Dawson, southern head of the Fitzroy, station after station is being formed always nearer and nearer to Rockhampton. Separation has come. Queensland has a Parliament of its own, and liberal inducements are offered by enactment to enterprising men who will explore waste places and foster pastoral occupation thereof. William Landsborough, man of energy and ideas, goes forth, with exploring party, jingling with pack-horses, disappears northward, and presently returns, gaunt, with empty flour bags, last fig of tobacco consumed weeks ago, hungry, empty, save his note-books, in which are jotted down memoranda and sketches. Tree marked at junction of this creek with that, and so forth. Has skirmished over territory equal in extent to largest of German principalities. The whole watershed of the Isaacs River is rough-sketched in his note-books, and he fills in endless forms—"Application



Mount Morgan.

for Pastoral Lease." In numbers Mr. Landsborough presently has unstocked runs for sale. Purchasers are ready, and the flocks and herds stream out unceasingly. The overlanders' bullock waggons come empty to the township. Steamers from south churn the water of the river again, more and more. Bringing station supplies. Bringing bushmen to join the overlanders. The town grows and solidifies. The Broadsound country northward is all parcelled into cattle stations.

Beyond Canoona, Princester Station is formed, with sheep; then follows Marlborough, named by some student of history, and comprising several blocks of country styled Blenheim, Malplaquet, Ramillies, and Oudenarde. John Douglas is at Tooloom; Macartney, son of the Dean of Melbourne, at Waverley.

The Allinghams have, with their sheep and drays, stormed the frowning ramparts of the Main Range, and invaded the country beyond; Connor gives his name to a river, and forms Collaroy.

Town lots in Rockhampton are attractive to shrewd southern investors. No land sale in distant Sydney now. Mahommed must come to the mountain. Here, for instance, in 1861, blazing December weather, is Sir Charles Nicholson, distinguished politician, surgeon, ex-Speaker, from N. S. Wales, at Mother Wakefield's hotel, to bid for allotments and incidentally to help the oratorically lame Alfred Sandeman, Parliamentary candidate, over the election stile.



The years roll on, and the far Barcoo—Sir Thomas Mitchell's Victoria River—is being parcelled out into stations, and always it is through Rockhampton that the stores go and the wool and the tallow and the hides come. The town grows unceasingly. The mud flats in its river are dredged, and there its railway strikes westerly. Gladstone old residents groan as Rockhampton monopolises the trade which should, they aver, belong to their noble harbour. But still the town grows, and is growing, with its public buildings — courthouse, post office, hospital, and grammar schools—on the breezier ridges back from the river, Mount Morgan tributary township not far inland and connected by another railway, and settlement around becoming denser as years go by. After the Barcoo the Thompson—named after John Malbon Thompson, solicitor, of Ipswich, Land Minister for the time, son of sometime Deputy Surveyor-General of New South Wales—the Diamantina, West, and still further West, are occupied, and Rockhampton is the port. This brings the history of the town up to date; but it is not the end. Come to think of it, 'tis but the beginning. Not yet half a century since the first vessel discharged freight on the river bank, below those rocks which bar higher navigation. In

the coming half century there is development, transformation, growth. To-day is as good a day as yesterday. This generation of pioneers and of immigrants has chances ahead, as good as the greybeards



Post and Telegraph Office, Rockhampton.

who as young men pitched tents where now town lots are worth more money per foot of street frontage than the early campers earned in their luckiest year.

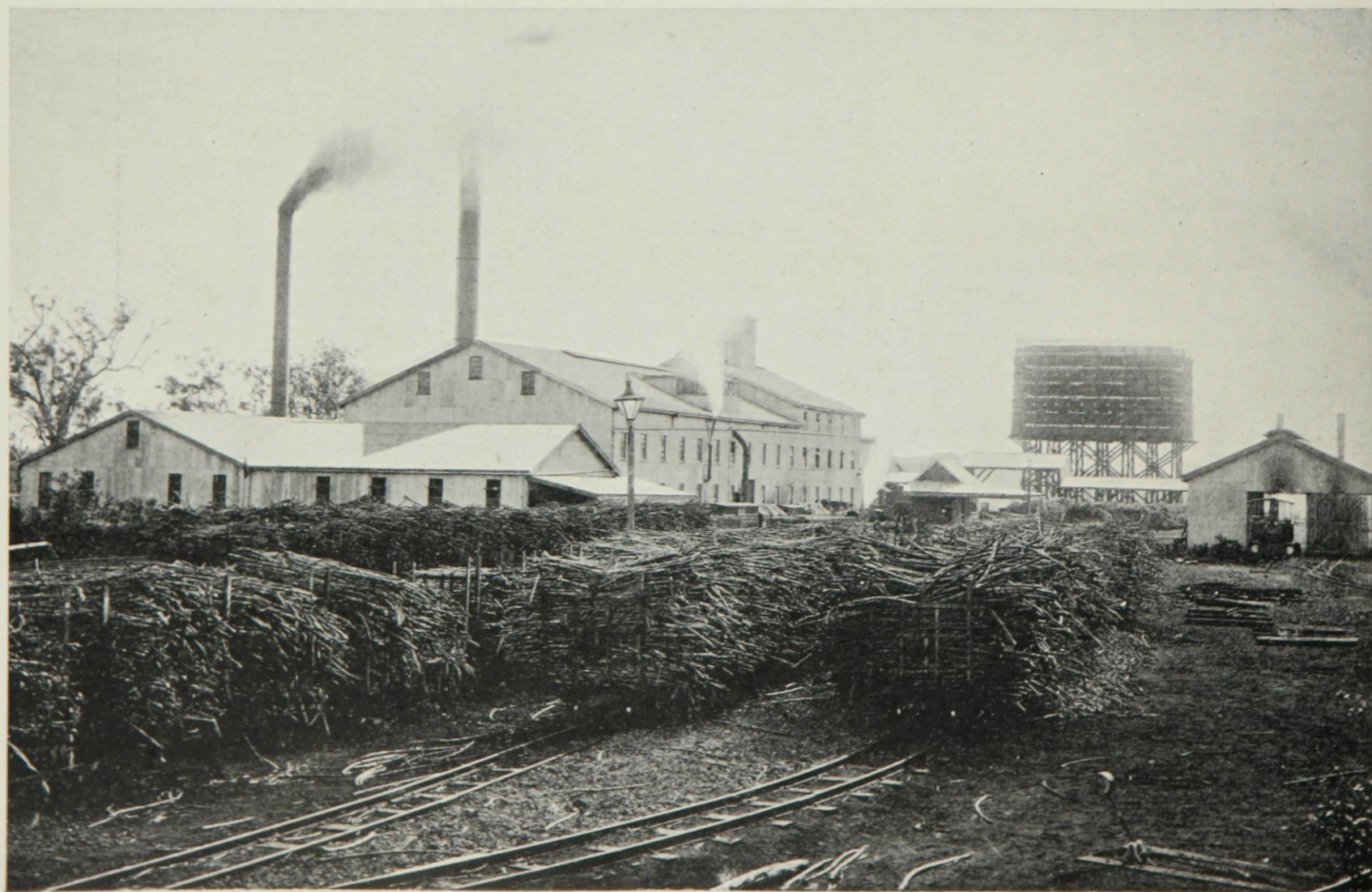






**I**t is among the singularities of Australia that several of its principal rivers have, instead of being discovered by maritime enterprise by ascent from their embouchures, been first met with inland, and, often after the lapse of years, traced to their mouths. This is strikingly exemplified by the whole network of streams, which, having their head watershed, mainly within the boundaries of Queensland, as far North as the 20th degree of South latitude, find their way towards the Great Australian Bight in South Australian territory, and have practically no mouth at all, but lose them-

selves in the marshes and sands of Lake Eyre and the coast. Oxley was completely puzzled by the Lachlan and Macquarie in interior New South Wales, which, after a northerly course, seemed to be absorbed by immense reed beds. Nearly the entire watershed of the Burnett River in Queensland had been for years occupied by sheep and cattle "runs," while yet its mouth was unascertained. When Mr. Stuart Russell, pushing out northward from the Darling Downs, passed the range which separated the Condamine country from tracts watered by a stream with a northerly trend, he believed he had hit upon the head waters of the Boyne, which



Isis Central Mill.



discharges into Port Curtis. Even now one of the head branches of the Burnett—that which Russell fell in with—is on maps named the Boyne. It was not until pastoral settlement had been pushed so far coastward and to the north that squatters felt the absurdity of procuring supplies and sending their produce of wool either by way of Gayndah to Ipswich, or to Maryborough, that any real attempt to trace the Burnett to the ocean was made. In 1862, indeed, an official was dispatched, by way of Hervey's Bay, from Maryborough to inspect the coast lying between Wide Bay and Port Curtis. Coming upon the mouth of a fair-sized stream, he concluded that the object of his

higher up from the coast. Worse still, the river was bordered by belts of dense scrubs, impenetrable to travelling stock, and indeed also to white men either on foot or on horseback, unless content to cut their way with tomahawk or billhook. Still, by skirting the scrubs, the difficulties of the route were overcome, and a station, Bingera, was established at the river just at the point where the ocean tide ceases. This accomplished, it was not long before, boldly launching out in a native canoe, an exploratory party of voyageurs from the cattle station paddled down stream and came in sight of the ocean where the Burnett discharges between two sandspits.



Burnett River.

Bundaberg.

mission was accomplished, and returning reported that he had found the Burnett to discharge in a small bay with a narrow rock-bound entrance, useless for shipping. It is now supposed that it was the mouth of the Elliott, an insignificant coast stream, which he had found. A year later, Mr. Alexander Walker sent a mob of cattle with drovers to follow down the river from the more settled part, on its upper reaches in search of unoccupied country.

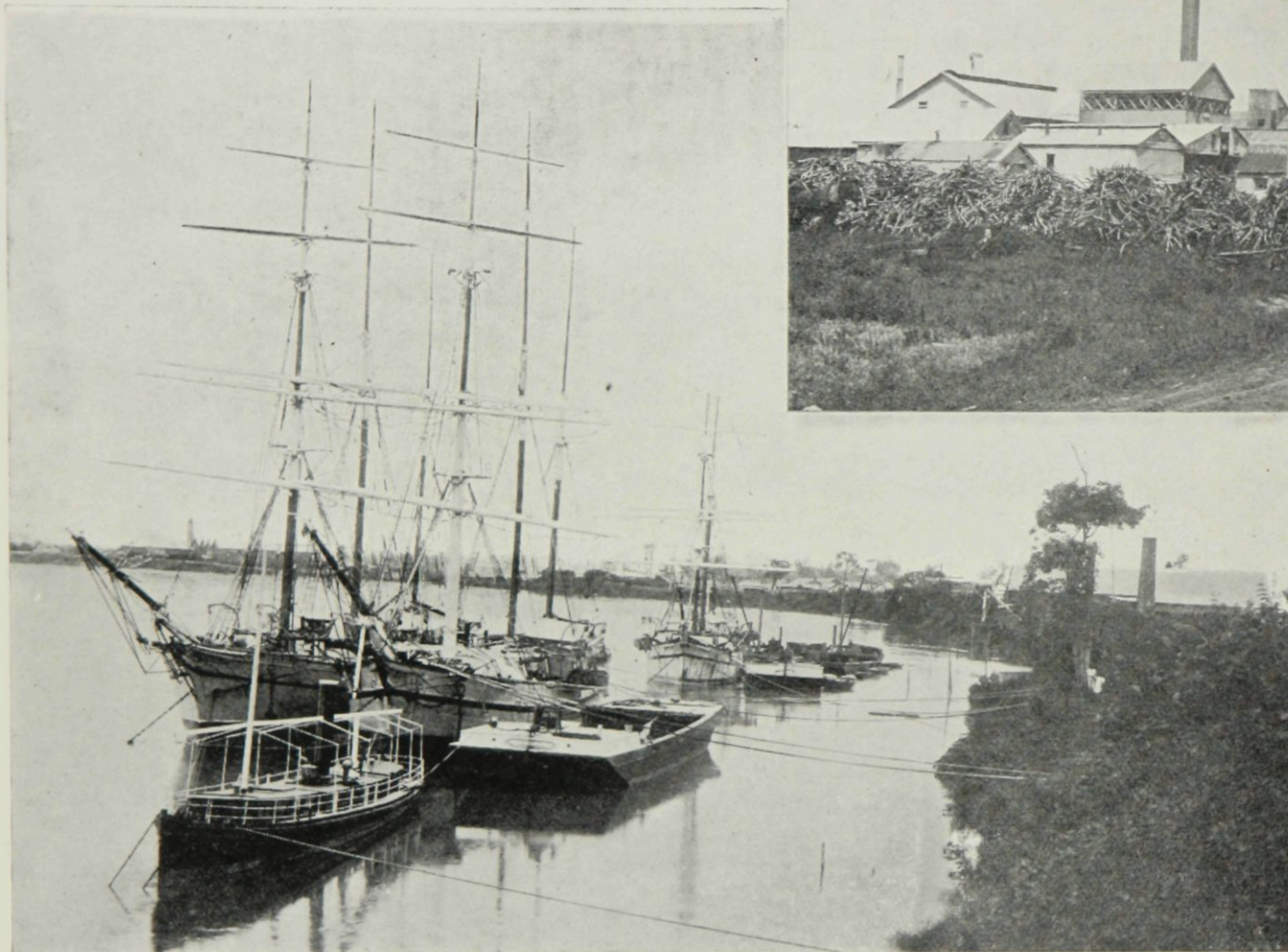
The coast blacks were unfriendly not only to white men, but also to the semi-tamed black-boys of the Upper Burnett tribes, who accompanied and assisted the drovers. There were considerable tracts of very poor grazing country separating the better grassed lands

Three years elapsed before another step was taken, and again the ordinary course of progression was reversed. It was from the comparatively unpeopled North, and not from the more populous South, that the next settlers came. At Baffle Creek, some 50 miles north, between the Burnett and Port Curtis, an establishment, for boiling down for their tallow the cattle of the squatters, had been created. Thence came two brothers, Stewart, to seek, in the extensive vinescrubs which clothed the northern bank of the Burnett, timber suitable for cask-staves. The richness of the soil impressed them, and in 1867 they selected, under the Coffee and Sugar Regulations of 1862, 320 acres of dense scrub land, to which scrub the name of Woondooma was given. Others followed their example, and in the same year the first vessel to enter the Burnett Heads came up the river. The ketch Elizabeth brought machinery for a projected sawmill. The abundant pine in the scrub had attracted attention, and Mr. Samuel Johnston came from Rockhampton, acquired from a selector named Watson,

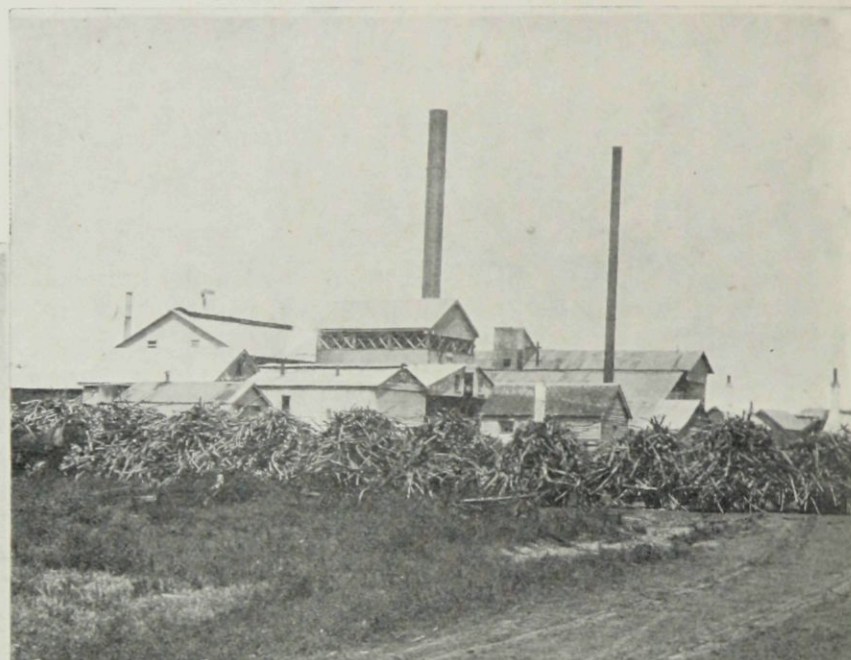


whose property adjoined that of the Stewarts, a suitable site, and there established his sawmill, which is still at work under his own supervision. The more general and very liberal provisions of a new Land Act in 1868 gave an impulse to settlement. Considerable capital had been required to start a sugar plantation. The savings of an industrious mechanic or bush hand sufficed for the first necessities of an ordinary selector. Considerable numbers came to pick choice pieces of country, generally including some portion of scrub-clothed alluvial on the banks of the creeks and minor rivers in the vicinity. Messrs. Alexander's first selection in the Woondooma Scrub was parcelled out and portions sold for village settlement, and thus a township sprung up on the north bank of the Burnett. The Government, however, thus late in the day, recognised that a new centre of population was in course of formation, and surveyed town lots

consumed by fire, and replaced by broad fields of sugar cane, flourishing on the rich red soil. Similarly on the south, the more extensive Woongarra Scrub, which had blocked the access from inland cattle stations to the sea coast, succumbed to the enterprise and labor of a throng of hopeful and indomitable selectors. And presently another great tract of once detested jungle on a small river still further south, named the Isis, was attacked, invaded, and conquered. Compe-



Shipping, Bundaberg.



Bingera Sugar Mill.

tence rewarded the industry of the small selectors, and storekeepers and tradesmen in Bundaberg acquired wealth. The town was surveyed, luckily, after the inconvenience of the narrow streets laid out in the earlier towns had become a topic of popular and general reprehension. They are of ample and even majestic proportions on the south side, adequate for the great city which in years to come it is not unreasonable to expect will

on Crown lands opposite, on the south bank, where the land was level, and, except a narrow fringe along the river bank, was open forest. Official headquarters being located there, inns for the accommodation of persons coming in to do business with the Lands, or for legal contingencies, soon followed, and gradually the growth of the southern village overtook that on the north, so that the latter is to-day a suburb of the former. A great impulse was given to the place by the discovery of lodes of rich copper ore at Mount Perry, some 70 miles inland, for the produce of which the Burnett was the most convenient shipping port. Steamers made Bundaberg a port of call. The small farmers relied chiefly on the cultivation of maize, and when, after a few years, a tremendous fall in the price of copper closed the copper mines, the town and district suffered a period of suspended animation. But the selectors, who had found maize a crop too often unprofitable, owing to fluctuations of price, turned their attention to sugar-growing. Years of great prosperity ensued. The Woondooma Scrub, which had been an obstruction on the north side of the river, disappeared, levelled by the axe and then

grow from the present nucleus. The main street, a very fine avenue, as will be seen on glancing at the illustration, is two chains wide. The secondary streets are one chain and a half. There is a noble promenade reserved fronting the river. Quarter-acre allotments which, at the first auction sale, held in Maryborough in 1871, could not be got rid of at £4, and were subsequently sold as low as £2, have during the subsequent years changed hands, when in positions which have proved commercially attractive for retail trade, for as much as £1,000 to £4,000; and it is said that for one allotment, at the intersection of the principal street with another, £9,000 was offered and refused. It is quite possible that young people who read these records in the first years of the twentieth century may yet, before old age comes upon them, remember them with the sort of amused sensation with which the elders of to-day recall the trifling prices given when they were young for town lots in Melbourne, Sydney, and Brisbane, and even in some Australian cities not metropolitan, which now are worth more per foot of street frontage than their whole price then.



Nomenclature has, in two instances, been peculiar, in this town. Bundaberg, which has a Scandinavian twang, is grotesquely hybrid. "Bunda" is said to be the name of the aboriginal tribe which dominated this locality, to which the old Saxon "Berg"—a mountain, a rock, and hence a town such as in feudal times grew and clustered round the hill-perched fortress of the chief—has been violently wedded. With equal infelicity, the principal street is, by municipal inspiration, placarded as Bourbong street. This is a phonetic spelling of the spoken name which is derived, in a curious roundabout way, from the last royal family in France.

The loyalty of French commanders gave to two islands in the Indian Ocean, when these fell into their hands, the names respectively of The Isle of France and of Bourbon. The cultivation of the sugar-cane early became the chief industry in these isles. When the sugar industry was battling its way through difficulties to success in Queensland, and rust was a formidable disease, varieties of cane from all parts of the tropics were introduced. The Bourbon variety became a favourite, and its merits resounded in so eminent a centre of sugar-cane cultivation as Bundaberg, and its name was considered appropriate for its principal street. The municipality covers an area of 2 square miles, with a population of 5,000, and rateable property to the amount of a quarter of a million sterling.

Timber-getting continued a resource for many, for the supply of trees was still abundant and accessible, and the product, alike in log as sold to the three local sawmills, and in planks, scantling, and so forth as turned out by those establishments, was exportable, and found a constant and remunerative market in the southern capitals. The selectors became timber-getters when cultivation of maize and pumpkins was barely profitable. And in turn timber-getters became selectors and cultivators when agriculture on another basis offered enhanced inducements. Every man instinctively desires a home of his own. Teamsters, travelling inland with freights to and from pastoral stations or mines, or hauling logs from scrub to

mill, coveted and needed a paddock for their beasts and a cot for their families, and the easy terms upon which the State parted with land encouraged them to acquire suitable areas. For years there continued good opportunities for successive selectors. The earliest, who had first pick, did not, as it happened, monopolise the cream of the country. His requirements demanded grazing land in the main. His prospect of being able to clear and bring under cultivation land for agriculture was, so far as he could foresee, strictly limited by the number of hands in his own family. There was no prospect of

his being able to employ labor. But as stage by stage the very profitable results of cultivating sugar cane became apparent, selection proceeded on altered lines. Selectors were not afraid of a piece of scrub. On the contrary, the scrub land, being of greater richness than the open forest, was what they mainly sought. A slice of open country, to serve their working cattle and milch herd for the first few seasons was a desideratum and a convenience, but in their altered view more a luxury than a necessity. Still the struggle was a severe one. An old industry in a new region, undertaken by men who had never practised it, was certain to surprise them with unforeseen difficulties. It was not sufficient to conquer the scrub, and by prodigious exertions plant a crop amidst stumps and logs which had resisted the burning. Even when a splendid growth had rewarded their initiatory efforts, there was exhausting labor in keeping down rank weeds, and freeing the growing canes from superfluous leafage. And when the canes were matured, only one part of



Timber-getters.—A "Moreton Bay Pine."

the enterprise had been accomplished. The juice has first to be expressed, and then—the greatest difficulty of all—it had to be converted into marketable sugar. From these pioneers much was exacted. The teamster or the laborer of yesterday found himself under the necessity of being not only axeman, ploughman, fencer, house-builder, and cultivator of a crop which neither he nor his neighbours knew much about; but he had also in many instances to



address himself to rough and ready engineering, to rig up some efficient device for crushing his cane, when he had cut and carted it; and even to manufacture sugar from it. He was fortunate, indeed, if, in addition to all these demands upon his body and his mind, he had not also to wrestle with financial problems. Probably there were few who had reserves of capital adequate to carry them through the experimental stages of their novel enterprise. Their lands being only leasehold and on a tenure voidable by cessation of residence, were no solid security for pecuniary advances. Their personal character for industry, perseverance, and steadfastness had to be thrown in to the bargain. The only people who were in a position to make a valuation of such peculiarly personal security were the storekeepers with whom they had been dealing perhaps for years. These found it to their advantage, and, in fact, necessary to retain their connection and keep their business going, to support their customers. They in turn threw weight upon the wholesale purveyors in Brisbane or other commercial centre, who, again, rested upon accommodation furnished by the banks. Thus the bank's shareholders had their percentage of profit; the merchant took his commission for shouldering some of the

obligations of the storekeeper; and the storekeeper passed on the accumulated charges, swelled by his own dues for risk and trouble, to the selector. Nature alone offered her bosom with free affection to this one of her children. The soil repaid his toil manifold, and made it possible for him to bear all his various burdens. The financial liens were most complicated or tangled after all, and the basic security was really sound. Land and labour: These are the foundations of all finance, however complicated may be the superstructure. Ordinarily the storekeeper, if the selector's demands upon his assistance become onerous, was able to cover his risk to some extent at least by bills of sale on his customer's chattels and live stock. As a rule cash was not demanded by him. The housewife on the selection obtained what article was necessary by petty dealings in such minor products of a homestead as butter, eggs, poultry, and so forth, as the selection and circumstances allowed. Groceries, tools, implements, and clothing the storekeeper furnished, and most likely had a lien on the coming crop. Given good average seasons, the arrangement worked all right in course of time, and the Bundaberg town and district to-day rank among the most solid and substantial, financially speaking, in Australia.











# QUEENSLAND

Shewing the situation of  
PROCLAIMED GOLD FIELDS,  
MINERAL FIELDS, COAL MEASURES  
AND ARTESIAN WELLS

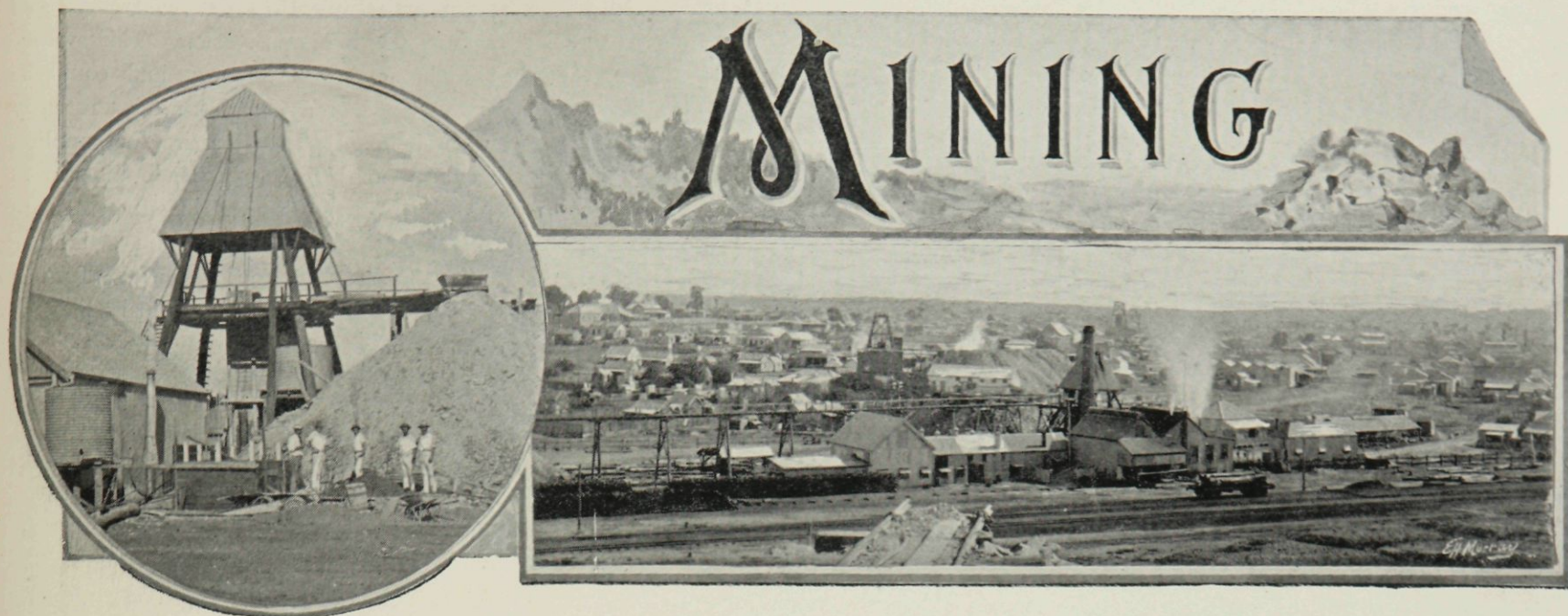
1901  
Scale of Miles  
0 50 100 200

GOLD FIELDS.		
No. 1 ARATIE DOWNS	No. 24 *GYMPIE	No. 47 *PALGRAVE
2 BARKUNDOO	25 GREEN HILLS	48 PARADISE
3 *BOOLBOONDA	26 *HODGKINSON	49 PICCADILLY
4 BOMPA	27 HORN ISLAND	50 *PICTDALE
5 BOWERBIRD	28 JORDAN	51 RAINBOW (MOUNT)
6 BALCOOMA	29 *KILKIVAN	52 RAVENSWOOD
7 *CALLOPE	30 *LANSDOWNE	53 REID'S CREEK
8 *CANAL CREEK	31 LEYBURN	54 *RHODOLANDS
9 *CANIA AND KROOMBIT	32 LUCKY VALLEY	55 ROCKY RIVER
10 CANOONA	33 MOUNT MORRAN	56 *ROSEWOOD
11 *CAWABERRE	34 MAXWELTON	57 RUSSELL RIVER
12 *CAPE RIVER	35 *MILTON	58 ST. JOHN'S CREEK
13 *CHARTERS TOWERS	36 *MORINTH	59 STANWELL
14 *CLERMONT	37 MORAL CREEK	60 STARCKE
15 *CLONCURRY	38 *MOUNT SPENCER	61 STRATHALBYN
16 COEN RIVER	39 MULGRAVE	62 *TALGAI
17 CROYDON	40 MOUNT WYATT	63 TATE
18 EIDSVOLD	41 MARODAN	64 *TAYLOR'S CREEK
19 *EYERIDGE	42 MARREBA	65 ULAM
20 EUNGELLA	43 NANANGO	66 *WOOLGAR
21 GAITA	44 NERO	67 *YARBA
22 GLATTONBURY	45 NORMANBY	68 YATTON
23 GRASSTREE	46 *PALMER	

MINERAL FIELDS		
I BOMPA	VII STANTHORPE	XII CUNNAMULLA
II CANNINDAH (MOUNT)	VIII STAR RIVER	XIII PAROO
III COOKTOWN	IX TENNINGERING	XIV KILKIVAN
IV KANGAROO HILLS	X KYNUNA	XV CLONCURRY
V OPALTON	XI WALSH & TINDRUM	XVI BURKETOWN
VI SELLHEIM		

COAL BEARING BEDS  
OPAL BEARING COUNTRY  
ARTESIAN WELLS





**THE** mining industry is not one of which lends itself advantageously to illustration, for reasons which need only to be stated to be immediately recognised. The essential processes are carried on in the bowels of the earth, and the only illumination is the feeble gleam of the ordinary candle which individual miners stick against the rocky wall in shafts, drives, and stopes, to throw a light on the spot where their blows are next to fall. And, again, even if the scene of their subterranean labors were flooded with sunshine, there is in most instances nothing either picturesque or interesting to the eye to be displayed. A gold mine may suggest to the uninformed a scene of dazzling splendour. In reality it exhibits nothing more attractive than a perpendicular well; dark, dismal, and dangerous looking; from which are found, by anyone descending, to branch off right and left, at different depths, gloomy tunnels. These when traversed are found to have openings overhead and underfoot into dense blackness, and to terminate in a face of rock, where a vein, which may vary from an almost imperceptible streak to several feet in width, of quartz, cleaves the strata. The prevailing and overwhelming aspect is one of dirt. Inspection might be made of an hundred profitable gold mines, and not one single speck of the noble, lovely, precious metal be discovered. The richest, in point of profitableness, copper mines in Australia have similar characteristics. Low-grade ore in masses, which have been proved more advantageous to work than small veins of great richness, are to the eye mere underground quarries of very dirty stone. The mines which have really something attractive to show are not generally the most famous nor the most profitable. There are few spectacles more dazzling—so far as the illumination of a few ordinary candles can make anything dazzle—than a vein of copper pyrites, or of galena (a sulphide of lead generally enriched with silver). Such a lode of copper does somewhat resemble what a mine of gold might be idealized to look like. And the lead mine might serve to take the place of the fancied mine of silver. In the first instance, a band of apparently solid gold—somewhat brassy, it is true—stripes the face of the tunnel, or “drive” as it is technically called, from floor to roof, with an appearance of impressive richness. In the latter case the band is silvery, with a bluish tinge, but with facets which glimmer like mirrors.

Even the great Mount Morgan Mine, of which we give pictures, taken from various points of view, in a later page, is no more to look at than a quarry of rubble would be.

There are few industries practised by mankind so seductive as that of mining, at any rate in such a climate as prevails over the Eastern portions of the Australian continent. A distinction must, however, be made between the digger and the miner in some particulars, although commonly the occupations are followed by the same individuals. The miner is often to the digger what the grub is to the butterfly. He labors for wages or at piece work, in the service of a master. The digger is a splendid nomad. Not gaudy in externals indeed, but magnificent in the perfection of his personal freedom, his enterprising spirit, his endurance, and the grandeur of his expectations, or, at least, his chances.

The wandering digger, in heavy marching order, is a familiar figure to travellers on any of the roads and bush-tracks of the Eastern portions of the colony from Macpherson's Range to Cape York. He is to be found also, in quite as great numbers—probably in greater—off all tracks whatever. That is to say, he could be found by very exhaustive searching. The stockman comes across him in the most remote and hidden corners of the runs. The squatter at mustering time perceives and curses his abandoned prospecting shafts, occasionally acting as pitfalls for cattle. On the move, the more prosperous digger is distinguishable from the station hand on his travels chiefly by the picks and shovels, the rusty dish, the bellows, and litter of steel drills and so forth, which on the pack-horse persist in thrusting themselves into notice. But when down on his luck, the digger cannot be mistaken for any other sort of man. His pick and shovel and his rusty dish, for “panning out,” are strapped on his swag obtrusively. No loafing “sundowner” would burden himself with that load of ironmongery. The shovel-blade is the wandering digger's honorable escutcheon of industrial rank, his symbol of independence. Thus equipped and weighted with the arms of industry and his commissariat for the campaign, and decorated with the accoutrements of his “branch of the service” of human welfare, he plods along. His kit differs from that of the mankiller in kind, but resembles it in weight. He carries, indeed, no blacking and brushes for his boots, no polishing paste for his buttons, but, instead, a pair of scales and weights for gold, and other equivalents. Like the private soldier in the army of Republican France, who carries in his knapsack the baton of a field marshal, the wandering digger rolls in his swag the bank-book of a millionaire.



It was such a wanderer who, in October, 1867, was plodding along the bush-track leading to Maryborough, trying a bit of wash here and there as appearances attracted his fancy. His noonday halt for a pot of tea and a snack was made one day by the water in a gully crossing the track. A lonely spot, on an obscure cattle station. While his quart-pot was by the fire to boil, he took his pick and shovel and his dish to "try a prospect." He had tried hundreds before, in his time. But when he washed the shovelful of earth this time, there was more in the dish, showing, than "a color," which can be got in multitudes of places in Queensland. There were more than colors. There was

that he labored somewhat energetically. In a day or two he had between £200 and £300 worth of gold in his possession. The "wash" lay almost on the surface. The gold was nuggety, and could be picked out, in spots, with the point of a sheath-knife. Presently commissariat troubles fell upon him. He had to retire for supplies. Obliterating as far as possible traces of his work, he made his way to Brisbane, and when he returned it was with reinforcements. A mate living in Fortitude Valley, a suburb of that town, and a brother summoned from Sydney, accompanied him to his gully. To put inquirers, who had learned he had much gold, off his heels, he gave



MARYBOROUGH.

"a fair show." It was worth following up. Accordingly another dishful taken with interested carefulness higher up the gully yielded a few nice shotty nuggets besides some coarse dust. The quart-pot came to the boil; it boiled away. Nash, the wandering digger, had lost his appetite for food. He had acquired, instead, an artificial craving—for gold—and was satisfying it fairly well. Before his normal appetite for food returned, he had made a week's wages. The sequel has been so often told that it may here be compressed into a few sentences. Removing his "swag" up the gully, out of sight of any chance traveller, Nash set to work in earnest. It may be presumed

out that he had dug it at Morinish, a gold diggings near Rockhampton, with the consequence that, while he was sneaking back to Traveston run, on the upper Mary River, a considerable "rush" set in to the northern diggings. Nash and his two companions had taken with them a dray with supplies, and hoped to escape intrusion till the patch—if patch it were—should be worked out by them. But the ubiquitous stockman, seen at a distance, made them nervous, and a passing swagsman, at whom their dog barked, scared them altogether. Besides, they began to realize that it might be not a patch but an extensive field they were on. They hurried into Maryborough, the nearest Gold



Commissioner's official place of residence, and reported discovery of a payable goldfield, and exhibited their gold—said to have been upwards of 1,000 ounces—demanding the legal reward—first pick, in this case, of twenty ordinary "claims," besides £1,000 cash if the thing proved substantial and lasting. The fountains of the deep broke forth. The prospectors led to Nash's Gully a procession, headed by the acting Gold Commissioner—a sergeant of police. Half the inhabitants of Maryborough took out miners' rights, and formed the procession. The electric telegraph flashed the news throughout Australia, and all Australia was taken in travail.

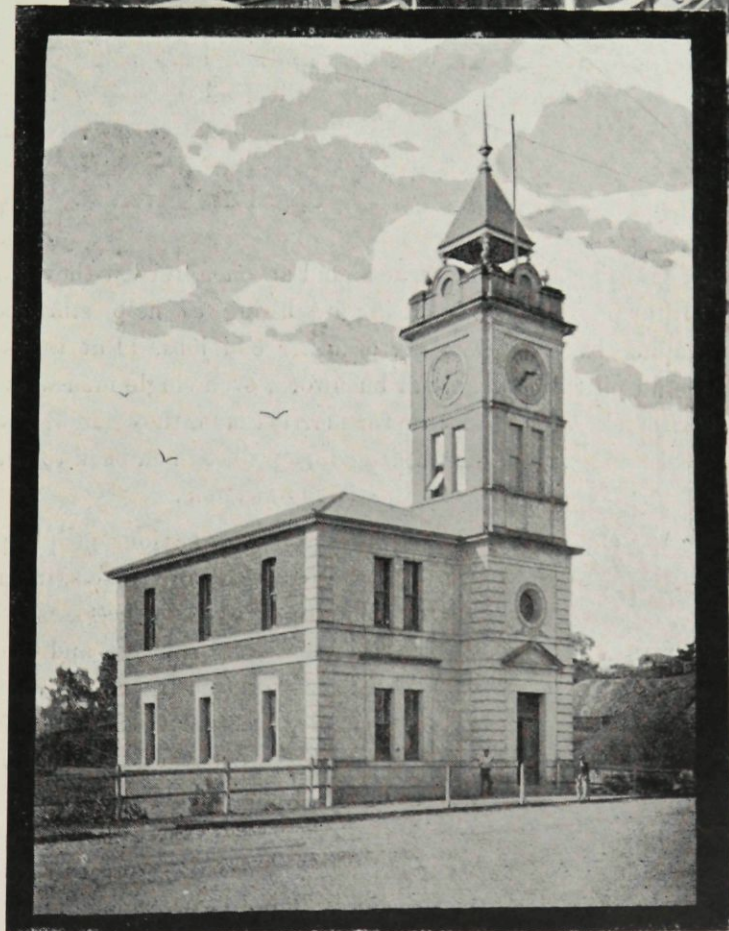
In Queensland itself the throes were acute. The Colony had been for two years in a condition of financial collapse. In 1866 a monetary crisis in England, with the failure of the Agra and Masterman's Bank, had spread its paralysing shocks abroad, and Queensland, an infant Colony, exercising its first tottering steps in self-government and development of its resources, was struck down. The Treasury was depleted. With one exception, the banks upon which most of the operations of commerce, trade, and of pastoral and agricultural enterprise leaned, were but branches of establishments having their headquarters in London or Sydney. These institutions, staggering under the blows they were receiving, not merely shut off further accommodation in Queensland, but, striving to hold on their feet important customers in New South Wales, actually called upon their Queensland clients to liquidate their obligations. The one local bank shut its doors. The great firm of contractors who were engaged in the construction of Queensland's first railway—from Ipswich to Toowoomba—hard hit in England, suspended operations and threw out of employment a complete army of navvies with its staff of engineers, overseers, draftsmen, clerks, and so forth. The navvies, threatened with starvation, marched upon the capital, their approach preceded by wild rumours of intended sack and pillage. Measures were hastily concerted to avert a violent collision. The navvies were met at the outskirts of the town by negotiators and

by supplies of provisions. Relief works, at road-making, were arranged for them, at rates which sufficed to provide subsistence for themselves and those dependent on them. Currency having all but disappeared, Treasury notes for £1, issued to meet outlays, were readily enough accepted for local circulation. The Civil Service was pruned with unfaltering hand. The sufferings of the people of all classes at this epoch of the colony's fortunes can never be minutely described. All who could fled the country. In



GYMPIE.

THE PRINCIPAL STREET.



THE TOWN HALL.

Brisbane and Ipswich a considerable proportion of the better stamp of middle-class cottages and villas were vacant, depressing objects with the weed-grown areas which had been trim gardens, and the broken panes of casements which women's hands had been wont to drape with taste. How the afflicted people existed during the following year is among the forever insoluble mysteries. There are hundreds of families yet which have their secret of desperate shifts and hidden humiliations. The very pawnbrokers were bending under the embarrassment of a one-sided expansion of business. Presently it became easy for families to house themselves, even handsomely, for a trifle. Rents had so fallen that landlords, and liquidators, and assignees were thankful to get respectable people to occupy houses out of the radius of first accessibility, and so save them from wreckage and decay. Food and clothing only had to be earned, or procured somehow. It was then that many people, who had never before known what it was to lack means for the proprieties, let alone the necessities of existence, learned



how small a fraction of their ordinary expenditure sufficed to sustain life. The climate of Queensland makes the clothing question a light one. The almost universality of the distress robbed it of its bitterest flavour. Keeping up appearances was so impossible all round and impecuniosity so universal that the sufferers felt little more concern about externals than the castaways on a raft might be supposed to.

It was in this condition that the population of the towns existed when the news came that at a spot within a few days' journey men had been picking gold in pieces as big as peas out of a creek bank with the point of a sheath-knife. Instantly the centre of gravity as regards the population was shifted. An era of multitudinous miracles set in. Men who had felt it impossible to find means to buy so much as a new band to a soiled wideawake hat contrived to equip themselves, in a fashion, for an expedition to the place of gold. They streamed along the hitherto little-trodden tracks through the bush to Gympie, a local name, suddenly reverberating through all Australia. Maryborough, the town nearest the place and the first to hear of its wonders, was almost deserted. There it was not merely the destitute but the business people who hurried to the field. It was thought more advantageous to have a shanty on a rush than a store in a half-dead township. Brisbane and Ipswich had not a straggler left. Even from the sugar-mills in East Moreton, although the crushing was in full swing, the employes departed, proprietors making the best of things by improvising the idea of granting a fortnight's leave of absence, in the hope that some would return. In truth, a fortnight had not elapsed before there were tramping back along the tracks, returning from Gympie, woeful stragglers, in pitiful straits. Hundreds of such unfortunates, their slender stock of provisions exhausted, their clothes in tatters, their boots held together

with string or strips of rag, re-entered homes where the cupboard had been bared to furnish them for their enterprise. Not that they had lacked courage or perseverance. They simply had not been in a position to hold out, even for a week. With wife and children at home, absolutely unprovided for, while they themselves arrived on the rush penniless and with but a few days' food in their swags, unless



Caboolture River.

they struck gold at once, retreat they must. Single men might pick up a living by hiring to help storekeepers to erect their rough premises, or other odd jobs. But unless they were laborers, or men handy at bushwork, even single men without some trifling means were beat; as for married men, they might risk staying and starving, but their heartstrings pulled them back to the wife and children who were perishing at home.

The eager, anxious people pressed towards the scene of expected wealth in streams, in groups, and even solitary men made their way, by accesses where never men had passed before. From Brisbane and the sugar plantations and farms of East Moreton, from Ipswich, from the Darling Downs, they struggled past the Glass House Mountains, by the head waters of the Maroochy and Caboolture Rivers, over the Blackall Range, then nameless, by the route now known as the Old Gympie road, up the Valley of the Brisbane from the D'Aguiar Ranges, by coasting vessel to Noosa, and thence through scrub and swamp, all converging in one direction. From the southern colonies steam vessels bore them to Maryborough, where they woke up the sleepy and almost deserted village to revived activity.

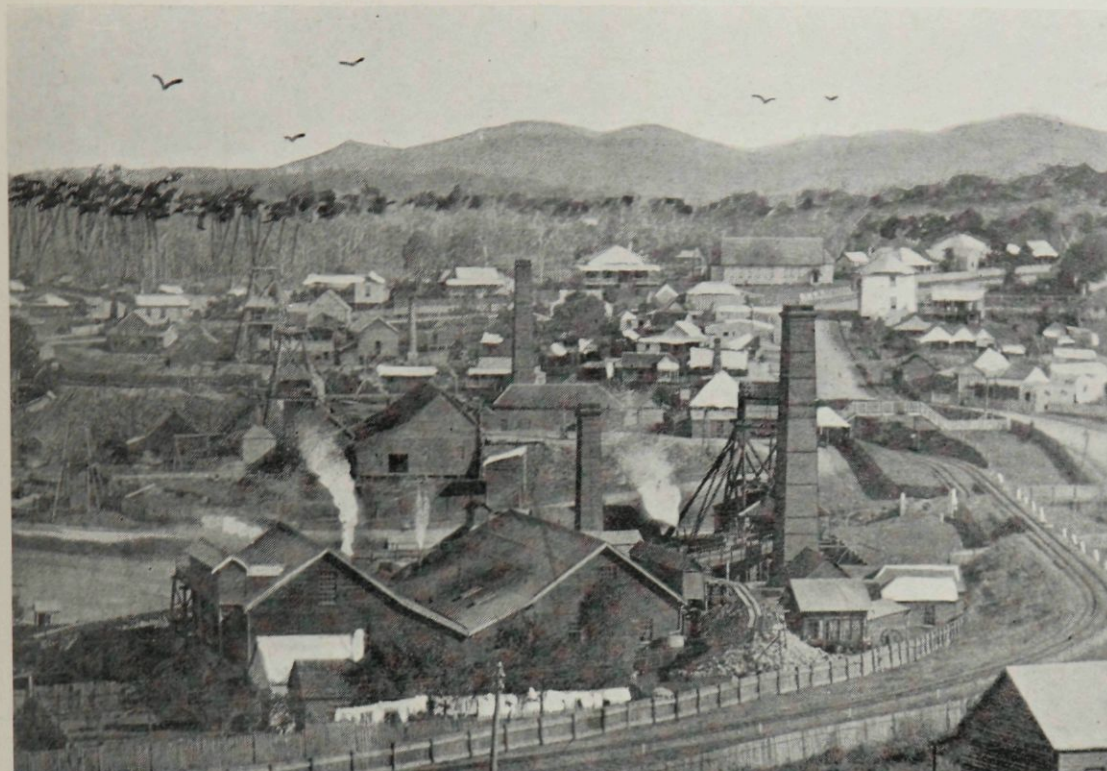
Nash's Gully was phenomenally rich, but outside it deeper ground and "duffers." That was the first verdict. Prospecting, however, presently proved that Nash's was not the only rich patch. Other gullies were treasure-beds also. The main street of the present town of Gympie is an awkward, twisting, narrow thoroughfare, with one inconveniently steep



Maroochie River.



slope. It is just as it was defined by the rows of hastily constructed shanties flung together, following the side of Nash's Gully. The percentage of rich claims was satisfactory. There was abundance of water



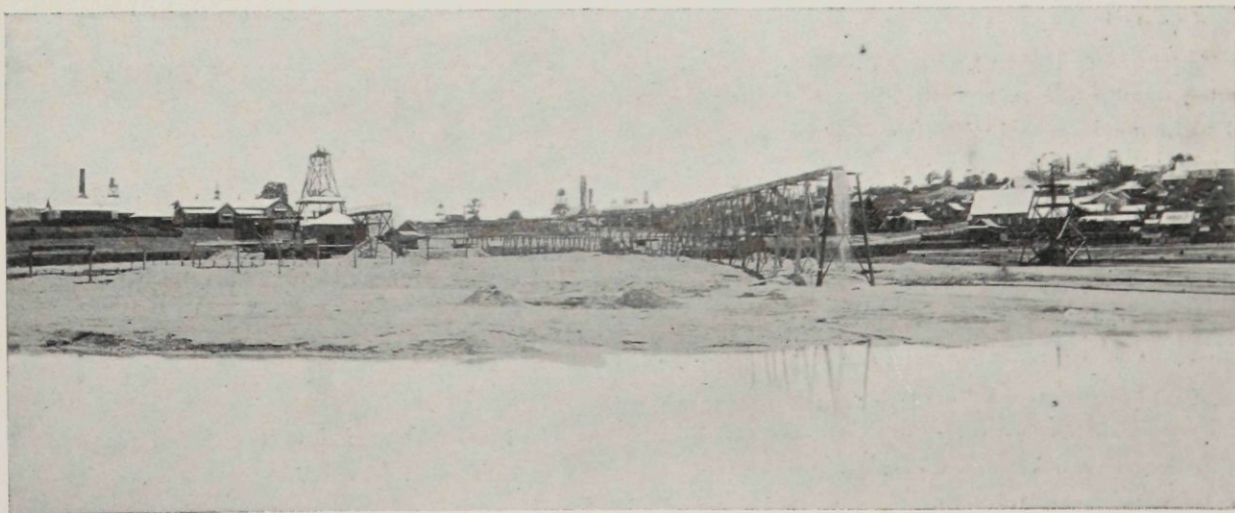
View in Gympie.

for washing, puddling, and so forth, close at hand, in the Mary River. Lucky owners of rich claims could be seen working with a pint pot beside them to receive the buttons, shotty bits, and rough nuggets, which they easily separated from the finer dust.

Alluvial deposits of gold are rapidly exhausted, especially when, as was the case at Gympie, the superincumbent earth is shallow. The very name of Gympie would have sunk into its original obscurity had its perpetuance depended only on the richness of the alluvial gold there; and where the bustling town now stands, nature would have resumed her sway, and only a few mouldering posts, and the cicatrices of her bosom, wounded and torn by the picks and shovels of the diggers, would mark the place where, for a term, excited thousands swarmed and toiled. But, as the alluvial gold became scarce, the diggers, who included many veteran quartz-miners from all parts of Australia and New Zealand, turned their attention to search for gold in the usual matrix—quartz. Success was immediate and startling. There were quartz-reefs, and they were found, on being broken into, to be rich—exceedingly rich—in gold. Interest in the field, which had begun to flag, was revived, and stirred up minds to which a mere alluvial rush scarcely appealed. For it is not necessary to abandon one's home and throw up a business or a situation in order to participate in the profits of a rich quartz-reef. The accounts which were circulated respecting the Gympie quartz-reefs were as remarkable as the stories of the alluvial, and as true. The prospectors had, with a few strokes of the pick, laid bare veritable "jewellers' shops." The

quartz was held together by bands and strings of gold. The lucky owners put aside their specimens by the bucketful, and guarded them in their tents, keeping watch and watch, armed to the teeth. Reefs were pegged out right and left, and, capital and machinery being necessary to realise the wealth entangled in infinite grains through the average stone, companies were speedily inaugurated and shares offered to speculators. Then Gympie was not only born, but in the teething stage. It is now more than adolescent, and thus we come to statistics. In the alluvium, one Curtis unearthed a mass of virgin gold weighing over 80 lb., and worth £3,675; when machinery was provided, the Caledonian Reef had 10 tons of stone crushed which yielded only a fraction short of 1,000 oz. The Prospecting Claim on the same reef crushed 3,164 tons of quartz which yielded over 75,900 oz. of gold. At the Two-mile a few buckets of stone contained 412 oz. The Lady Mary Reef had a parcel of 14 cwt. from which 2,320 oz. were extracted, and so on. No wonder that 15,000 people crowded to the spot. One and a-half million sterling is the estimated value of the gold won from the alluvial digging alone. From all sources, the output to the end of 1899 has been little short of one and a-half million ounces of gold.

The little town, for years past linked by the North Coast Railway with Brisbane, 106 miles to the south, and with Maryborough 61 miles to the north, cannot be said to have claims to elegance. It is the hard type of a mining township. In every direction the "poppet heads" and other structures connected with the shafts protrude amidst the residences of the population. The low ground is everywhere invaded by sheets of sludge and tailings—the refuse of the mills; while miniature hills of mullock—rock hewn out of the mines in order to gain access to the veins of auriferous quartz—obtrude at every shaft-mouth. The population of the district nearly equals what it was at the high-water of the "rush," numbering about 15,000. Within the municipality the number is 11,000 odd. But of course there is this



Battery Tailings, North Phoenix, Gympie.

difference: During the rush, of the 15,000 or so of persons who, according to estimate, were on the field, probably ninety at least out every hundred were males of "soldier age." Now the actual quartz-



miners, upon whose brawny shoulders the whole population is supported, number somewhat less than 2,000. Timber-getters, carters, engine-drivers, and machine-tenders make up less than another thousand. To minister to the producers are some 1,200 tradesmen, and over 10,000 women and children make up the total of the community. There is practically no class of idlers: a typical hive of working bees.

The effect of the Gympie Rush upon the fortunes of Queensland was to arouse the Colony from the sort of lethargy into which it had sunk in consequence of the financial crash of 1866, already described. Parties of diggers, who found, or believed, that the best spots at Gympie were already appropriated, scattered widely, and there were good finds in various places, as in the Yabba scrubs, and at Jimna and Kilkivan, to the last of which places a branch railway now penetrates. Deposits of cinnabar, an ore of quicksilver, were discovered at the last-named place, but the lodes proved erratic. A spirit of enterprise was, however, revived in the colonists generally. Proof that one goldfield, permanent as well as rich, existed in north-eastern Australia, discountenanced the previously prevailing notion that Queensland differed in this respect from Victoria and N. S. Wales.

known to exist in any quantity in the Continent. On the banks of a little creek running through a somewhat barren tract of granite country, poor land for grazing, and despised accordingly, the ubiquitous



Mount Jimna.

digger had often enough "tried a prospect" when "on the wallaby," just as Nash did at Gympie Gully. But in that tract of coarse granite sand, panning out merely led to disgust. There is generally found in the washdirt, whether gold be present or not, some "black sand," a mineral, mostly iron, often magnetic, which

remains in the dish when the earthy particles have been got rid of. It makes a little difficulty in separating the gold dust, and is regarded as somewhat of a nuisance. Hence the prospector found his dish cumbered by a provoking abundance of a black metallic sand inseparably mixed with minute gem-like stones, red, white, and greenish. This mess made it difficult for him to ascertain whether there were any "colours" of gold



The One Mile, Gympie.

Hardly had mining at Gympie begun to settle down to a regular industry, when a fresh impulse was given to the spirits of the population by another mineral discovery; this time of a metal not previously

mixed up. But one day it occurred to a gold-seeker that this black sand might be "stream tin." It was. The quantity almost in sight seemed enormous. It lay close to the surface, among the very grss



roots. It is unnecessary to dilate on the immediate consequence of the discovery. For mining metals other than gold, the laws of the colony at that time gave the most liberal encouragement. Blocks of land could be appropriated up to a square mile in extent, and there was nothing to prohibit one individual or company from securing as many such blocks as he or it desired. A deposit of 5s. per acre and survey fee was required. On expenditure of £1 per acre on mining operations, and payment of a balance of 15s. per acre, the selector of the land was entitled to a grant in fee-simple. The situation was on the Severn River, close to the southern boundary of the colony, at a considerable elevation, and consequently one of the coolest localities in Queensland. The little farming and pastoral town of Warwick, only 58 miles distant, was by that time the terminus of a railway which, starting from Brisbane, passed through Ipswich and Toowoomba. Being thus easily accessible from the most populous parts of the colony, the banks of the Severn and of its tributary, Quartpot Creek—the spot where the first discovery was made—were soon overrun by eager seekers after a slice of tin-bearing land. As soon as any sort of map, affording a starting-point, was available, blocks

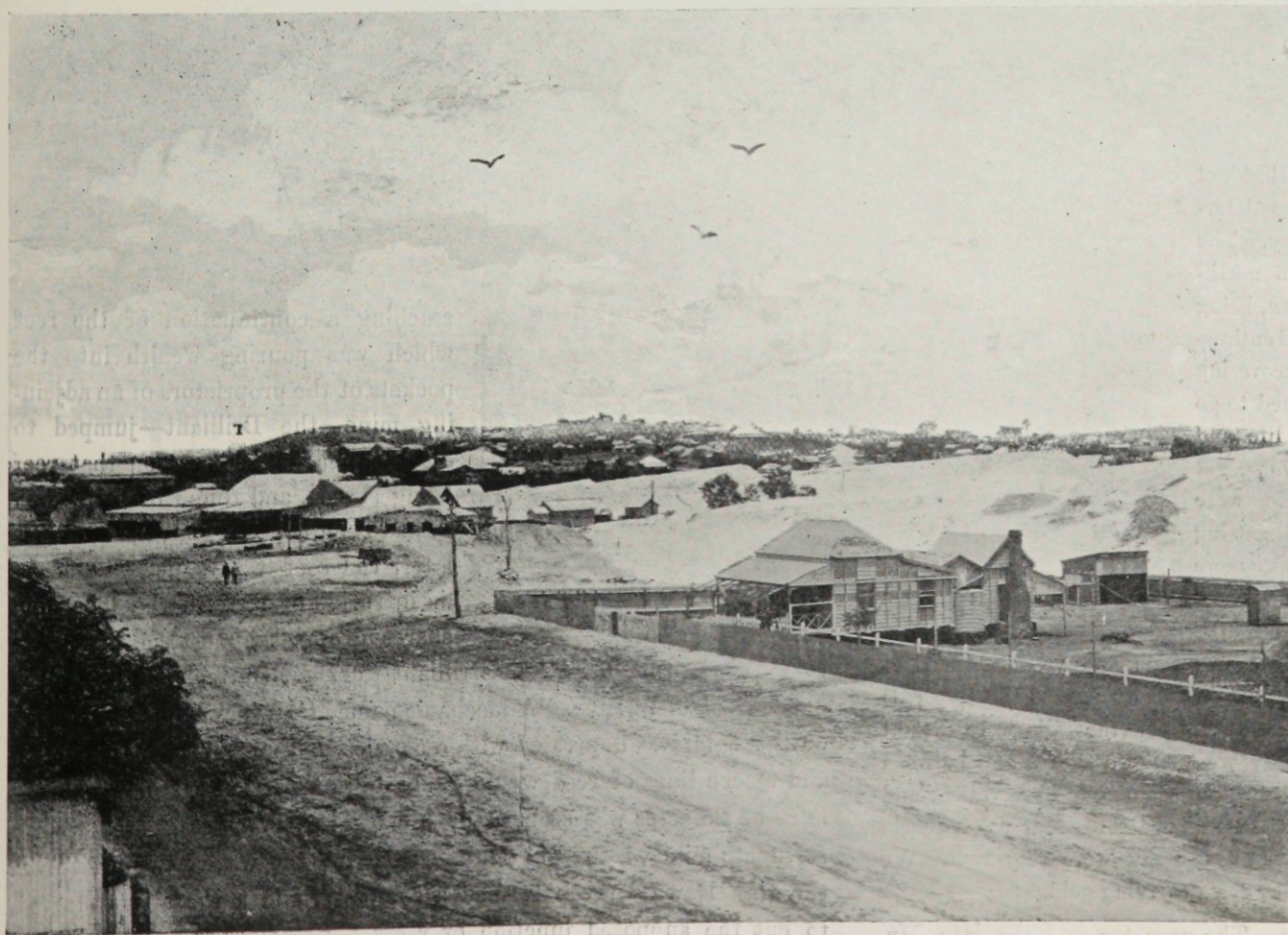
were applied for, without much regard to the obligation of first pegging out on the ground. Thousands of acres were thus appropriated, and money flowed into the Treasury. Coaches from Warwick to the



Stanthorpe.

field were put on. The town, to which the appropriate name of Stanthorpe—compounded from Latin for tin and Saxon for a village—was given, sprung into existence. Lodes were sought for in vain. But the alluvial tin was present in quantities adequate, and in

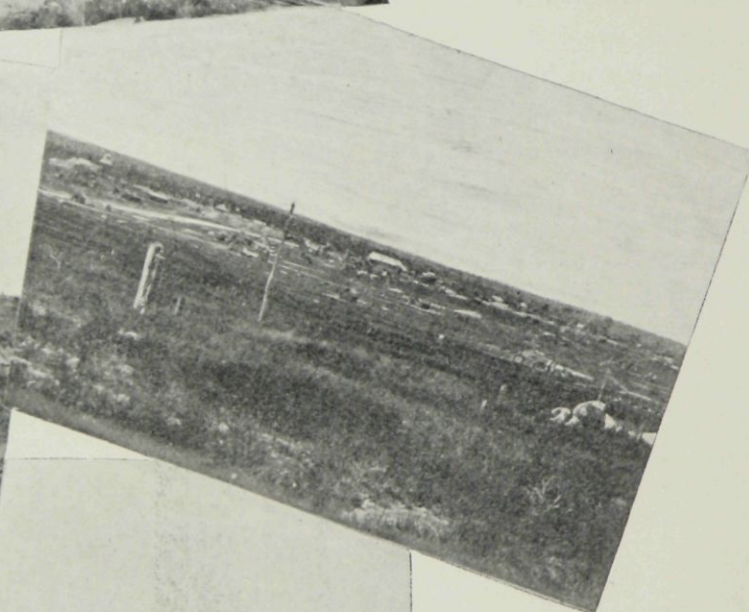
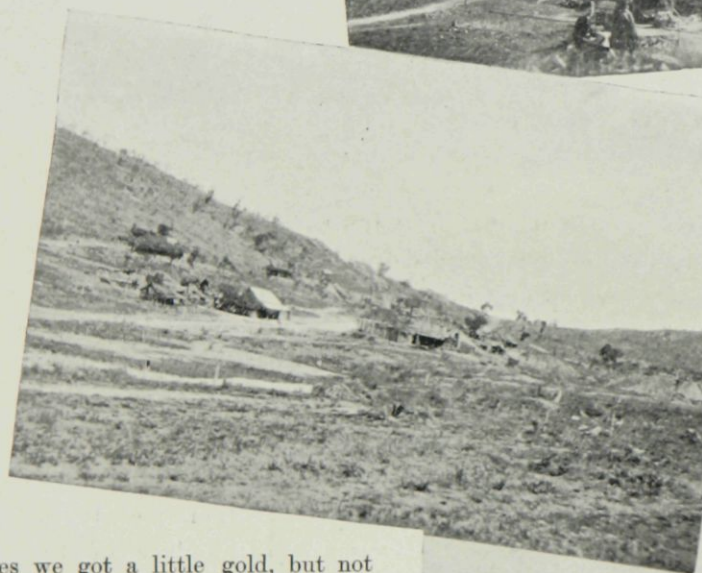
accessible enough situation to maintain, in the face of many falls in market price of the metal, a considerable population, and to settle sufficient numbers of them in homesteads, engaging in various agricultural and fruitgrowing avocations, to make the town permanent. Since the first discovery of tin the metal has been exported to the value of upwards of four millions and a-half sterling, the bulk of which came from Stanthorpe, although the Herberton tableland has produced much from lodes and alluvium, and will probably yield yet more. The soil, in most parts, too poor for cropping, is not unsuitable for orchards, and the comparative coolness of the climate permits of successful cultivation of fruits which do not suit the lower levels. Cherries are largely grown, and find a ready market in the metropolis.



Quartz Mill "Tailings."



Although Gympie was the earliest important goldfield discovered in Queensland, it has had to yield the premier place as regards productiveness as a quartz-mining centre to Charters Towers, situated on a northern branch of the Burdekin River, 82 miles to the south-west of Townsville, from which part a railway has been constructed passing through the goldfield and extending 286 miles further inland to Hughenden and Winton, centres of pastoral country. The discovery of the Charters Towers field was the rich prize which rewarded the exploration of a party of three prospectors, who, with an ample equipment of horses and provisions, traversed hundreds of miles of country partly in pastoral occupation, and partly unvisited before. The spirit and temper in which such adventurers entered upon and persisted in their quest for the holy grail of Australian errantry—the chalice of fortune—can be learned best from the language of one of themselves:—



Sometimes we got a little gold, but not what we considered payable; still we determined to keep on for a year, if necessary. The valley of the Burdekin, westward and north-west, was untried country, and somehow, being young, comparatively inexperienced, and enthusiastic, we were always sanguine of discovering a good goldfield. If not, we determined to go still further north. It was a pleasant life, and although disappointments were numerous, yet the possibilities, if somewhat uncertain, were great. We prospected the Broughton, getting a little gold everywhere we tried, becoming more plentiful as we neared the 70-Mile Pinnacles. A cluster of conical and square-topped hills away to the north had often attracted our attention, and we determined to prospect in that direction. We found gold in the locality of the (present) Merry Monarch Lease, but not payable. From this the hills were distant about 4 or 5 miles. The following day we went through a gap between the hills which had so long formed the subject of our observation, and camped near the outcrops of the North Australian Reef. Masses of quartz were strewn about the surface, which we at once saw were very rich. We prospected for several days, finding other reefs carrying gold, and—

The remainder needs no telling. The narrator was the late Mr. G. E. Clarke; the others of the trio were Messrs. Hugh Mosman

and J. Frazer. The name of the Gold Field Warden of the district was Charters. The place is to-day Charters Towers, a name as well known on the London Stock Exchange as throughout Australia. A municipality with some 16 miles of street, of which the main thoroughfare bears the name of Mosman, leader of the prospecting party. Electric lighting, an excellent service of water supply, half-a-dozen newspapers, a population of upwards of 25,000, a brisk, keen winter temperature, and a summer heat modified by an elevation of about 1,000 feet and remoteness from the moist atmosphere of the coast, constitute a modern mining town of unusual attractions, considering that it lies almost on the 20th degree of South latitude.

On no goldfield in Australia have the vicissitudes of fortune had more remarkable exemplification than has been the case in connection with Charters Towers. Fluctuations in the estimate of value of different mines have been sudden and extreme. In the Brilliant and St. George, shares which sold at 6d. while a shaft was being sunk in the hope of

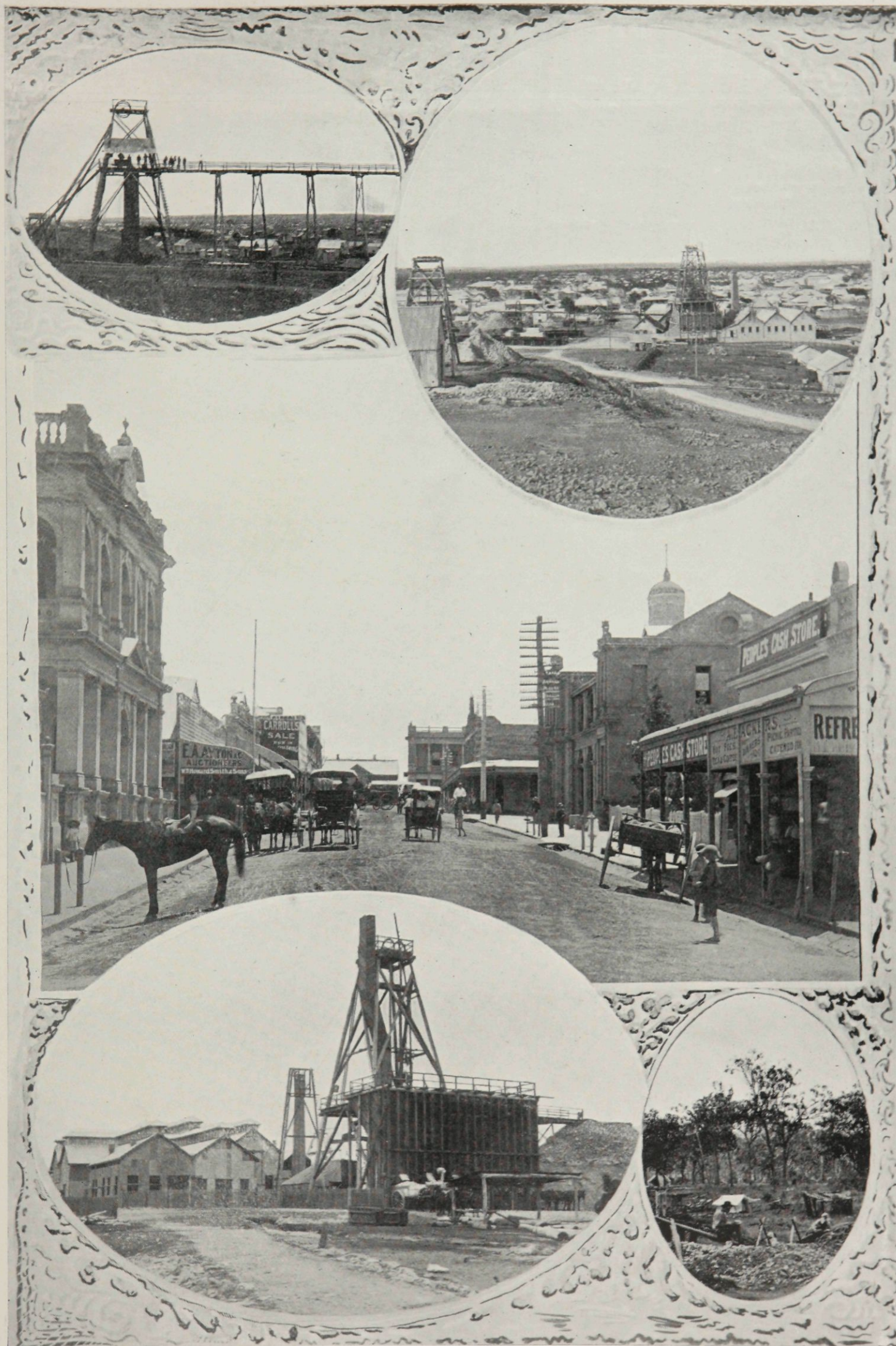


The Beginnings of Charters Towers.

reaching a continuation of the reef which was pouring wealth into the pockets of the proprietors of an adjoining mine—the Brilliant—jumped to £2 14s. in a few days upon that reef being struck, and found to be as rich as had been hoped. But, a short space later, the reef was squeezed out by an intrusion of rock in the lode, and shares dropped almost as deeply as

they had risen high. To the Brilliant Reef itself attaches a story of a queer freak of fortune. A mechanic named Craven, who had prospered on this field, was impressed with a conviction that the rich Day Dawn and Queen lines of reef would junction in a certain locality, where a lease of 25 acres was secured by him. Financially associated with a fortunate miner, retired to Dublin to enjoy the wealth acquired from the Day Dawn, Craven formed a company, and a shaft was started, to cut the supposed junction of reefs. Three years the work continued. A depth of over 900 feet was attained, at a cost of £9,000,





In and Around Charters Towers.

A POPPET HEAD.

VIEW OF THE TOWN.

MOSSMAN STREET.

PROSPECTING.





BURDEKIN RIVER WORKS LOADING TAILINGS.

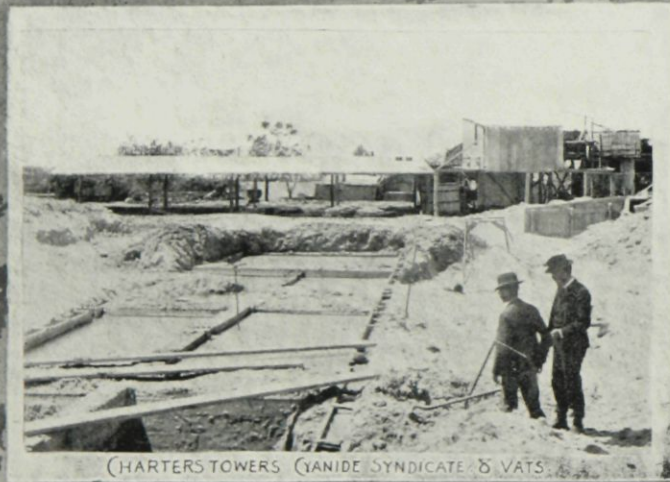


CYANIDE PROCESS WORKING OLD TAILINGS.

# CYANIDE WORKS CHARTERSTOWERS



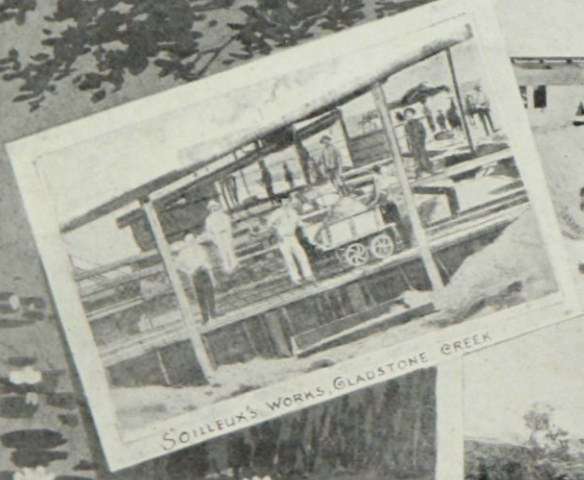
DAY DAWN BLOCK & WYNDHAM WORKS.



CHARTERSTOWERS CYANIDE SYNDICATE & VATS.



BRILLIANT BLOCK WORKS, RECEIVING VATS.



SOILLEUX'S WORKS, GLADSTONE CREEK.



BRILLIANT BLOCKWORKS, TAILING PITS.



BURDEKIN RIVER SCENE.



Ashley



and still the object of the enterprise had not been realised. Local quidnuncs who had ridiculed Craven's theory from the first were in the seventh heaven of a justified "I told you so." As the event proved, they were correct. Craven's notion had been a blunder. In despair, the sinking was suspended. The miners were set to try what might



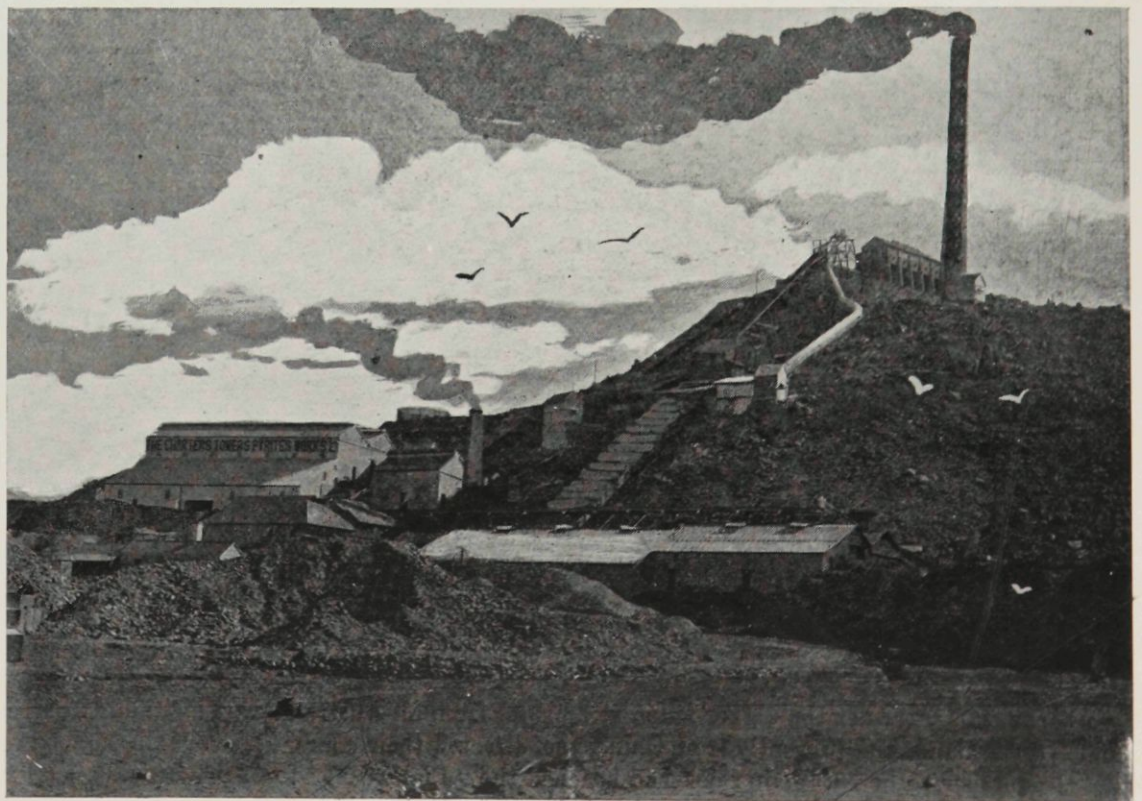
The Mining Exchange, Charters Towers.

come of following along some indications of a reef which, about 40 feet higher up, they had passed through as unworthy of particular attention. The veins of quartz, when driven along, expanded into a solid body. It was a substantial reef. It widened to 3 feet; it widened to 8 feet. It was spangled with gold. Craven might have been a blunderer, but Craven was rich. He invested judiciously in engineering works, and what not, on the field. Then, having no more worlds there to conquer, he removed to Sydney, built a whimsical mansion, on an acre or two of land in a depression which just dropped his windows below the level of the seascape close at hand, became a patron of the fine art of racing horses, and died very rich and universally respected.

A different lot was that of Frank Stuble, blacksmith. The St. Patrick's Block, of which he was proprietor to the extent of seven-eighths, struck rich stone, and poured a stream of gold, which seemed as though it would never cease, into his pockets. In one year, 1876, he drew £30,000. Saturated with money, and elected member for the district, with over a quarter of a million sterling, he, too, sought relaxation in the south. Confident in his ability to heap up wealth where others, his former equals, failed, he aimed at turning hundreds of thousands into millions by bold adventure. He speculated in wheat among other things. In a very short time he was a ruined man. Penniless, he instinctively sought the scene of his triumphs. Trudging along the track to Croydon, he sank by the roadside and breathed his last.

The Palmer Gold Field, although at present only among those of inferior rank, is one which on its first discovery as an alluvial field was among the richest in Australia, and is not unlikely before many more years shall have passed, to resume, as a reefing district, its pristine pride of place. The Palmer takes its name, very fittingly, from the late Sir Arthur Palmer, K.C.M.G., by whose Administration, when in 1872 he was Premier of Queensland, a party of prospectors was dispatched to examine the wild country on the heads of the Mitchell River, at the base of Cape York Peninsula. The leadership was entrusted to Mr. William Hann, a gentleman experienced in exploratory work in connection with searches for country suitable for pastoral purposes. With him were Mr. Taylor, a geologist; Dr. Tate, a botanist; Fred Warner, a young surveyor and draftsman; two other whites, and a blackboy. The expedition started from Fossil Brook, a station on a branch of the Lynd River—so named by Leichhardt in honour of his friend the Commissary in Sydney—and, striking north, crossed and named successively the Tate, the Walsh, and the Palmer, all of which are affluents of the Mitchell. Thence they made their way to Princess Charlotte Bay, and, working up the Normanby, reached the Endeavour River, where they were disappointed to perceive no traces of Captain Cook's historical visit to repair his battered ship. Again pushing south, they found themselves entangled in the valley of the Bloomfield River,

a sort of barber's basin with the open lip to the ocean, the rim a horseshoe of lofty, steep, and rugged mountains, like the bowl clothed with the densest tropical scrub, abounding in cedar. Compelled to turn back, they made as directly as possible for the



Pyrites Works, Charters Towers.

Palmer, and then retraced their steps to their original starting-point, after having been beyond the ken of their fellow-colonists for five months, during which time they had encountered every hardship and peril, and had once had to fight for their lives against attack by a



powerful array of blacks. They had found no payable gold anywhere. On the Palmer, indeed, young Warner found a fairish show, by panning, and was rewarded with a half-pound of tobacco.

But Mr. Hann's official report, though cautious, was not discouraging. "I wish," he stated, "to be very guarded in all that relates to these discoveries. . . . The gold found by me I believe to be lighter particles washed down, ages ago, from sources where it exists in larger quantities." This sort of utterance was just accurately poised. It prevented any rash rushing, while it was promising enough to induce a well-equipped party of experienced, resolute, North Queensland diggers to set forth to trace, if they could, the sources where the sprinklings of gold found by Mr. Hann and his companions might exist in larger quantities. J. V. Mulligan and three mates, properly provided with horses, arms, and provisions, struck for the Palmer within a year. They disappeared among the rugged ravines which had harassed the Government expedition, and where beds of contorted slate, all on edge, wrenched the shoes from horses' feet, and crippled the beasts, if not reshod on the spot. When they emerged, they were burdened with gold.

The inevitable rush ensued, and as Mr. Hann's journeyings had led him to indicate the Endeavour River as the nearest port for

been climbed by some aspiring buildings as the frontal space became congested. There is one peculiarity about private residences adjoining Cooktown. Although the climate is very warm, these villas turn their backs to the prevailing breeze of the summer months. The south-east trade-wind, in fact, blows so strenuously during some hours of the day that the inconvenience it causes, if allowed free passage through a house exposed to its full force, is more annoying than the heat it moderates.

The Palmer rush, with Cooktown for nearest port, had the effect, among others, of reviving in an acute form the alarm lest Caucasian



Cooktown.

sea-borne traffic, thither the digger-laden steamships from all Australia and New Zealand, and presently from China, too, directed their course. On the very spot where Captain Cook had beached the "Endeavour" to repair her torn planking, steamers moored to the growing trees and threw to the shore rough gangways. Cooktown sprang, or sprawled, into existence. Fended off the ocean by a bluff headland, and jammed between a ridge and a mangrove-fringed estuary, the first street spread lengthways, and "like a snake dragged its slow length along." Moulded by the features of the locality, the town continues to have much the same aspect, although the ridge overlooking the river has

enterprise in Australia should be swamped by eruptions of myriads of Mongolians from their over-populated native country. From Chinese ports to the Endeavour River is not a very "far cry"; the distance from any part of Southern China is not much more than three-fourths of that from Liverpool or Queenstown to New York. The climate *en voyage* is hot instead of frigid. Chinese of the peasant class are even more capable of subsisting economically than the same class from Ireland or the English counties. A fraction of the immigration which pours into New York from Europe in a decade would suffice, if the transfer were from China to Queensland, to smear the population of that colony with a strong yellow tint.

The tidings of rich diggings within a couple of weeks or so of easy voyaging from their own land was swiftly diffused among the Chinese. There was no lack of enterprising British—aye, and of colonial—steamship owners to lay vessels on the berth in Chinese ports for Cooktown. Shiploads of the Mongolian adventurers were thus poured on to the banks of the Endeavour almost as early as were European fortune-seekers from the southern parts of Australia. The track to the Palmer was trodden by them in gangs. It was a road of difficulty and of danger. Fever lurked along its course, and starvation; and the path was beset by blacks more numerous and more actively aggressive than had ever

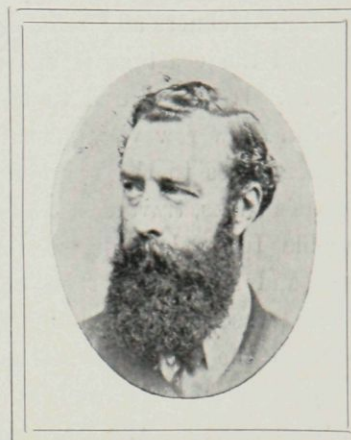


before been encountered in connection with a rush-road. Vehicular traffic at the outset was next to impossible—apart from the difficulty that every horse or bullock, every cart or dray, had to be brought by steamer. There was one particularly awkward “pinch,” even for foot travellers, which earned and deserved the name of Hell-gate. White men perished by the way. But the Chinese were the especial sufferers. Unarmed generally, save for the rods of tough wood to the ends of which were slung over a shoulder their prodigious loads of provisions and tools, they were an easy prey, when straggling from large companies, to the nimble aborigines with their spears. But, with wealth ahead of them, they were no more daunted than the Caucasian is under the same incitement. Paying heavy toll to the savage, to fever, to exhaustion, to starvation, still a locust-swarm of Chinese reached the gullies of golden gravel and occupied thousands of “claims.” The alluvial gold was thus exhausted much more rapidly than would otherwise have been the case, and the opportunities for the white digger more than correspondingly circumscribed. There was sufficient, however, to yield in the first five and a-half years gold to the value of three millions sterling before the readily accessible treasure began to be exhausted. From 1879 there was a rapid diminution in the product, which dwindled from 90,000 ounces in that year to 6,981 in 1887. Reefs had been found very shortly after the beginning of the rush, and batteries were at work in 1876, with excellent results. The average of the reefs upon which most work was done was not less than 2 oz. per ton of quartz. Fully 200 different reefs have been discovered. But, on attaining a depth exceeding 250 feet, it was found that mineral substances other than gold obtruded themselves in the reefs, and interfered with gold-saving by the simpler methods. Expenses and wages were heavy, and reefing received a check. A railway from Cooktown to Laura has, however, been constructed, and half the land carriage being thus effected by steam power, freighting to the field has been reduced to more endurable proportion. With the advances which science has achieved in late years towards the effectual and economical separation of gold from complex ores, there can be no reasonable doubt that the Palmer will ere long assert itself as prolific a reefing goldfield as it was an alluvial one.

Cooktown, while its prosperity undoubtedly reflected in some degree the decadence of its principal first cause of existence, more than managed to hold what it had gained. Once a settlement was established on the shores of so convenient a port, it was almost certain to persist. The basin of the Bloomfield, close at hand, where Hann and his exploring party had been entangled in the dense scrub, was, once a township came into existence on the Endeavour, promptly invaded by timber-getters, and selected by sugar-planters, while the ubiquitous prospector penetrating to the remotest corners here brought to light considerable deposits of tin. Pearling crafts from Torres Straits, used Cooktown as a basis. Chinamen cultivated fields of bananas. In short, there was need for a port on that part of the coast, and resources around it for a population of varied industrial occupations.

About a couple of thousand inhabitants of some 800 dwellings enjoy the benefits of municipal government and the benign sway of a mayor.

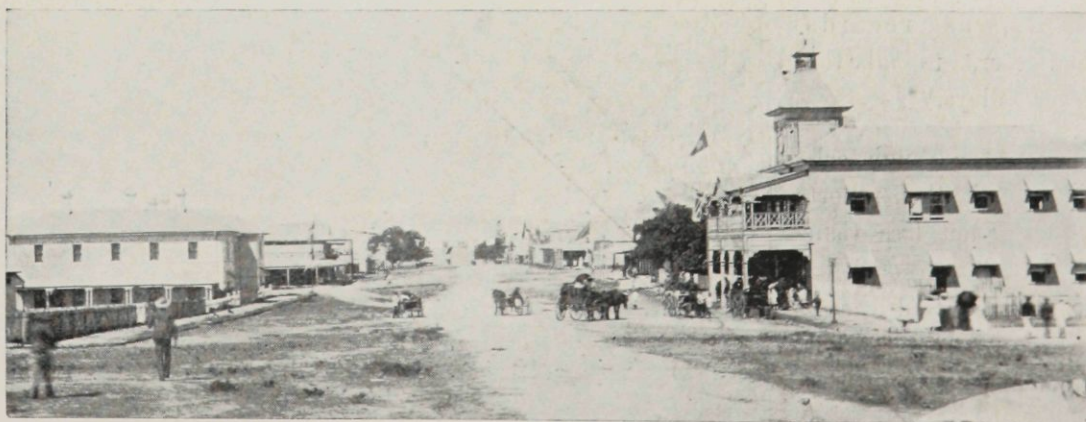
Between Townsville and Cooktown a long stretch of coast remained unexamined, when, by a bound, adventure landed in the latter place. But this hiatus was not of long continuance. Again under the auspices of the Government, an expedition was organised under the leadership of the late G. E. Dalrymple, to make explorations in that direction. George Elphinstone



G. E. Dalrymple.

Dalrymple was a very fine type of a class of early Queensland colonists more numerous then than now. Perhaps, however, the men are still among us, but the opportunities for gaining distinction are no longer so numerous. Dalrymple

was a handsome, dashing fellow—a Scotchman of the kind which so utterly departs from the popular idea of Scotch character derived from the idiosyncrasies chiefly of the peasants, tradesmen, and mechanics of the Lowlands. A cadet of the distinguished house of the North-Berwick Dalrymples, he was neither “canny” nor “thrifty.” A poor gentleman in the beginning of his career, he was a gentleman and poor to the end of it. He made more than one dash for fortune, but was constitutionally unfitted for the plodding subordination of every faculty to observation of the ways and means of accumulation. A natural soldier of colonization, he shone best when leading a party to storm the fastnesses of the wilderness. In the early sixties he had made a coasting exploration, examining the Burdekin mouths and adjacent parts, and later he led a cavalcade overland from Rockhampton to found the town of Bowen, on the harbour of Port Denison, a town, like Gladstone, of great expectations not yet fulfilled. He now took charge of a sort of amphibious expeditionary party, his route being by sea, and his complement of thirty-six followers including an inspector and thirteen rank and file of the Aboriginal Native Police. Embarking in two tiny cutters, the Flying Fish and Coquette, this armada sailed for the unexplored stretch of coast, which Cook had skirted, Flinders passed,



View in Bowen.

Bligh sighted during his terrible boat voyage to Batavia when sent adrift by the mutineers of the *Bounty*, and which Lieutenant Philip Parker King, afterwards Admiral, had superficially examined,



Dalrymple's tiny flotilla had the advantage of sailing in waters reduced to decent composure by the presence oceanward of the great Barrier Reef. His navigation was conducted on a system akin to that practised by those mariners of Pharaoh Necho, who, according to tradition, voyaged from the Red Sea, round the Cape of Good Hope, or by the Phœnician mariners who visited Cornwall, and, braving the terrors of hyperborean darkness and cold, penetrated to the Baltic. Dalrymple hugged the coast as if he loved it. It was indeed worthy to be loved. It was found to be both beautiful and rich. The world can show few views more exquisite than those which present themselves to the voyager who, following in the wake of Dalrymple's barks, traverses Whitsunday Passage. Seven streams, accessible to moderate-sized vessels from the ocean, were discovered and ascended. The character of the country bordering them was ascertained by landing parties. Among these rivers were the Johnstone, the Mossman, the Daintree, the Moresby, the Herbert, and the Barron. The indications of fertility were superb. The coast range, lofty and abrupt in these regions, approached the ocean and intercepted the saturated clouds due to the intense and abundant evaporation. With a rainfall almost superabundant, vegetation was prolific beyond Australian precedents. The fat soil was covered with densest scrub. Aborigines were numerous, sleek, and high-couraged. Reptilian life was plentiful. The rivers swarmed with crocodiles. Where the Johnstone River ceased to be navigable, Dalrymple climbed a hill, and was rewarded by a prospect worthy of all the trouble and expense involved in despatching the expedition, and which will serve fairly enough to apply, as regards character, to all the river valleys.

"At a rough calculation," the report states, "not less than half-a-million acres of soil unsurpassed by any in the world, all fitted for tropical agriculture, and fully 300,000 acres of which are suitable for sugar, spread far around us, penetrated in three different directions by navigable rivers, with a fine harbour and river-estuary visible on its seaboard. We had suddenly come face to face with a true tropical Australia, with a vast and hitherto

hidden region, the qualifications of which for every description of tropical cultivation at one stroke places our noble colony far beyond all Australian competition as an agricultural country."

Although more than a quarter of a century has passed away since



Barron Falls.

Cairns Railway.

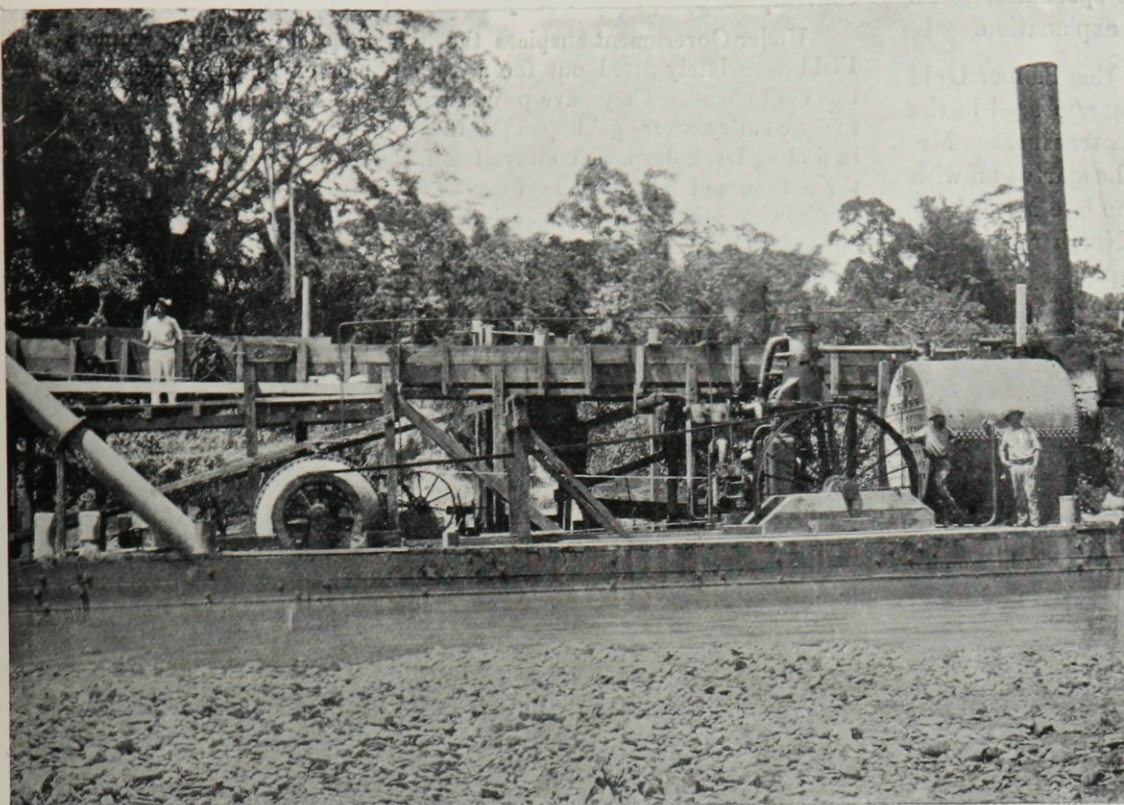
Dalrymple made those discoveries, and although their announcement was followed immediately by a decisive movement of speculators and intending settlers to secure for sugar cultivation as much as possible of the rich lands on these navigable rivers, it is yet too early to pretend to contrast their respective values. It must be constantly borne in mind that we are dealing scarcely at all with completed or accomplished transactions or deeds, but almost entirely with small beginnings of great things which are reserved for future generations to realise and accomplish. Even now the settlements and plantations on the tracts

through which these north coast rivers flow, appreciably as they add to the aggregate wealth of Queensland, are but baby communities. What they already are is much to the Queenslanders of to-day, who



remember what they were—the jungle haunts of blackfellows and liquid lairs of crocodiles—but yesterday, but is little in the estimation

in mud-banks heavily cloaked by mangroves, was illusory, and that an ample, though shallow, channel gave access to an interior harbor or



Dredging for Tin Ore, Rossville, Annan River, Cooktown District.

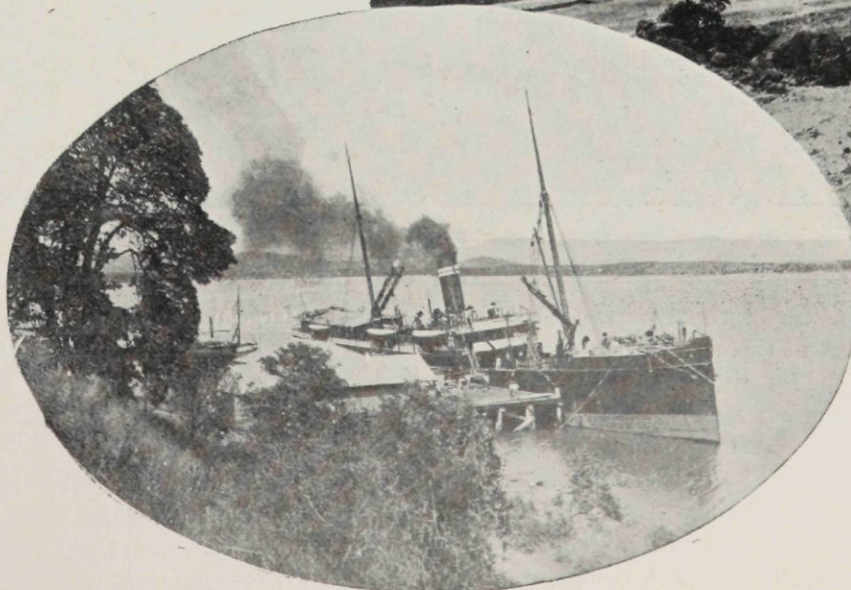
of those who ponder in the spirit of prophecy, and endeavour to conceive a true idea of what they will be a century hence or after many centuries. Really five hundred years is not a long span in history. Great Britain was a Roman province, just as Hindostan is to-day a British dependency, during more than 450 years, and the period seems to mark the page of history almost inappreciably.

What the relative importance of the different sea-ports may be after generations shall have succeeded one another, and the, as yet, scarcely foreseeable resources of this or of that tract of territory shall have been fully disclosed, is a subject for conjecture. For the time being, among these shipping ports Cairns has taken a pretty strong lead. Trinity Bay, upon the shore of which the town is situated, has a strong family resemblance to the majority of the roadsteads all along the eastern coast of Australia. A glance at a map will show a peculiarity common to nearly all. A projecting headland gives shelter to shipping from the wind and sea from the south and south-east, whereas to the north and north-east the roadsteads are exposed. Such is the case with respect to Trinity Bay, which shoals towards the shore so gradually as to require the projection of a jetty to permit vessels to discharge their cargoes. Cook and King had successively visited this indentation, but it required the more minute investigation by Dalrymple to discover that its apparent termination,

after the value of the tableland had been perceived, authorised to connect Cairns with Herberton. But so extreme was the cost of



Cooktown—General View.



Cooktown Jetty.

carving a track for the line up the face of the range found to be that, after the first and most expensive portion had been built, the colonists were fain to cry "enough," and postpone the prolongation of this line to some later period.



This later period has now arrived, and what was felt a decade ago to be too heavy a responsibility for the Government of the colony to support has been cheerfully shouldered by a body of speculators. In what manner this had become feasible deserves some explanation.

Following after the discovery of the riches of the Palmer Gold Field, the appetite for adventure was far from being appeased in the feelings of some of the prospectors who laid bare its treasures. Mr. Mulligan was not long before, backed by Government, he started off with a party, amongst whose members was comprised the late Mr. W. O. Hodgkinson, in subsequent years member for a Northern mining constituency, Minister for Mines in Queensland, capitalist prospector

search of those explorers. The impression created by the first-fruits of their journeyings at the time is aptly conveyed in the following contemporaneous comment by the *Brisbane Courier*:—

Under Government auspices the first prospectors of the Palmer Gold Field were lately fitted out for a fresh trip of exploration, and news from them is to hand. They have penetrated into pastures new. Seeking for the rocky country where gold spangles the soil, they are 'greatly disappointed' in finding level, deep, rich alluvial soil, well grassed and well watered, over three thousand square miles in extent, interrupted by mountains further south, where they formed extensive scrubs, estimated over one hundred and twenty square miles, containing very large cedar and kauri pine. They crossed the Main Range into the heads of the Herbert River, where there is



Cairns.

in Western Australia, and recently editor of the *Government Mining Journal* of Queensland. In the object of this renewed exploration the party was at first balked. They sought for those ragged tracts where the rock thrusts its points, like beckoning fingers, up through a thin soil, and seems to invite investigation of the treasures locked in its fissures. But this sort of "poor country," which is poor only in external appearances, and, like the miser who hides rouleaux of gold pieces and bundles of scrip in the chinks of his miserable dwelling or among the looped and windowed raggedness of his shabby attire, conceals rich wealth under an uninviting aspect, seemed to elude the

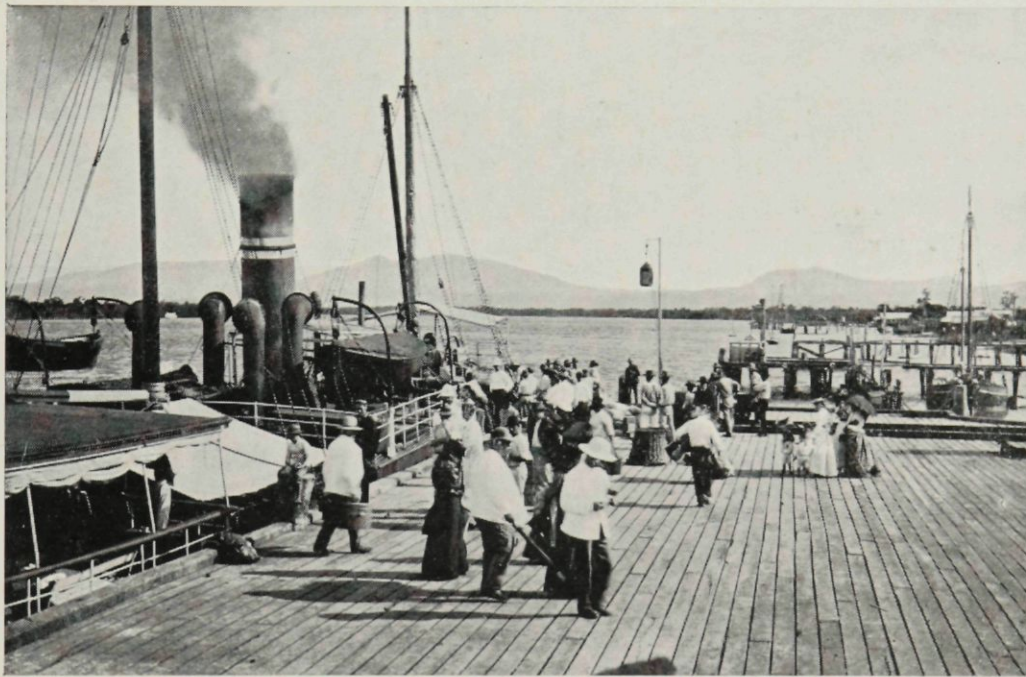
another large extent of very good level country. They obtained prospects of stream tin here, and then crossed the range again into western waters. There are, we imagine, few other countries on the face of the globe so rich in all the opportunities of nature that a discovery such as this could be announced as a great disappointment.

Not disheartened even by such remarkable miscarriages, the prospectors persevered, and their earlier mortification at being confronted by whole territories merely fit for every sort of human industry, save mining, was alleviated by the subsequent discovery of several promising tracts of mineralised strata, among which was the



field which assumed prominence under the name of the Hodgkinson. The usual flight of prospectors followed in their tracks, and spread in detachments over the face of the country. It became increasingly evident that in every direction the Herberton Tableland and the country on the heads of rivers which flowed westward to the Gulf of Carpentaria were studded with outcroppings of mineral lodes, while in the alluvium gold, in grain and dust, and stream tin existed in profitable deposits. Indications of fissures filled with ores of copper, gold, silver, and tin protrude, and it was the apparent magnitude of the scale in which the deposits occur, especially of the first-mentioned metal, which after some superficial mining induced speculators on the greater scale to apply for, and procure from the Government by legislative enactment, a concession permitting wide departures from the ordinary laws relating to the acquisition of mineral-bearing areas and conditions of labor thereon, in consideration of the concessionaires undertaking to construct a continuation of the Cairns-Herberton Railway from Mareeba, the point at which the work had been discontinued by the Government, to Chillagoe, where they had selected a big area of land seamed with numerous outcrops of cupriferous lodes.

It is not within the province of this work to enter upon minute description or to give detailed particulars of all the numerous centres of mining industry. That has already been done in a series of handy booklets, under the style of "THE GOLDFIELDS OF QUEENSLAND," each specifically devoted to some group of mines. It will be useful, however, here to intersperse some sort of general outline, indicating the distribution of mineral deposits, so far as at present known and worked in Queensland. Commencing in the south, a patch of the



The Jetty, Cairns.

Permo-Carboniferous formation occurs to the south-west of the town of Warwick, on the very margin of the Darling Downs. Wherever this formation exists in the colony it is seamed with quartz reefs, and gold may be expected. Here, accordingly, are sprinkled half-a-dozen groups of auriferous quartz-reefs, and some alluvial gold has been procured. In almost any other country in the world this would be a scene of intense industrial enterprise. But the Queensland miner and the Queensland mining speculators are epicures in respect to mineral deposits. Recognising that the industry is, under the most favourable conditions, considerably influenced by chance, they pick their ventures, from among the superabundance which Nature heaps upon their platters, with finicking particularity. There are sixty-eight proclaimed goldfields in Queensland, covering an area of over 18½ million acres—that is to say, about half the combined areas of England and Wales. To the outside world, and indeed to a large proportion of Queenslanders themselves, little is known respecting any but a few of the most extensive or the sensationally rich patches, such as Charters Towers, Gympie, and Mount Morgan. Unless every feature of reefs

is favourable, they are neglected and left to working miners, tradesmen in the adjacent townships, a squatter or two in the neighbourhood, and similar speculators on a small scale, to make the most of them. The more fractious the mineral contents of a reef, the costlier the buildings and appliances required to extract the gold, and the less the likelihood of money being forthcoming to provide anything of the sort. Unless a reef has sensational stone close to the surface, and is free from refractory mineral alloy at that, the prospector has no chance of getting any better backing.

There is no enterprise or industry known to mankind from which such things are looked for as mining for gold or other minerals occurring in reefs or lodes is, to a prevailing extent, expected to accomplish, and in exceptional instances does accomplish. But a prevalent misconception is to depreciate the industry because the exception is not the rule.

Some reefs or lodes are so phenomenally rich from the surface down to some depth, and for considerable distances along the line of the reef, that their first products can be converted into cash sufficient to provide

machinery, maintain the owners, and provide a large fund for progressive developments. Instances have been known, not only on Gympie and Charters Towers, but on other Northern goldfields, where the surface quartz has been so veined and knotted with gold that by sheer manual labour of the most primitive kind known even to savages—that is to say, by roasting the quartz to make it brittle, and then pounding it to powder with a pestle, large sums of money have been earned—enough in certain conditions of accessibility to pay for machinery. But

there are hundreds of reefs lying neglected or being slowly or most laboriously operated on by little parties—four or six—of working miners, which, if properly equipped and developed on an adequate scale to secure efficiency and economy, would provide handsome returns for the money invested. Even mines which have been highly remunerative, paying big dividends on very large nominal capital—for the few acres around the place where a bit of quartz specked with gold was picked up, and a few strokes of the pick showed that there was a reef spangled in like manner, have within a few months been capitalized in 100,000 shares of £1 each—have occasionally been abandoned when the character of the ore changed; changed, not from being rich to being barren, but from being rich in a simple form to being as rich or even richer in a complex combination of metallic substances. Even at Charters Towers the whole credit of the field tottered for a while when it was found that, after the level above which oxidizing influences had freed the gold in the stone from base associations of inferior metals had been exceeded in depth, the raw minerals mixed up with the precious metal so clung to it that the ordinary milling processes of the field were incapable of



effecting a separation. Scientific processes have always to overtake necessities of that kind as they arise, and the richest gold-producing locality of recent years, and of to-day, are not necessarily to be the richest of to-morrow and the years to come.

In cursorily passing under review, therefore, the at present minor goldfields of Queensland we will, in effect, be presenting to notice the ascertained localities where mineral wealth lies stored for the enrichment of generations unborn, during future periods of time, the duration of which cannot even be guessed. If we except the rolling downs country coast of the dividing range on the waters which flow towards the south, there is hardly any part of Queensland where the noble or the useful metals may not be hopefully looked for. Auriferous quartz reefs have been mined at Nanango on an extreme southern head of a Burnett River tributary. At Paradise, on another upper branch of the same river, rich and permanent reefs await the application of capital. The country

west from Maryborough abounds in mineral indications. Within a semi-circle, having Gladstone for centre, a fine alluvial deposit at Calliope sustained for some time a numerous population, and reefs, once worked, require only modern machinery. At Raglan nearly 3,000 tons of quartz yielded at the rate of 2 oz. 7 dwt. per ton. In brief the country here is gold-bearing in all directions. "Colours," &c., specks, or span-gles of the metal can be found on panning out soil from any one of thousands of gullies, and excellent results have been obtained from reefs

in half-a-dozen different places, many having been abandoned because, at a shallow depth, the ore became complex, and the expense of cartage and railway freight to the not exceedingly distant smelting works which purchase, when added to the heavy deductions and charges there exacted, left no profit from mining any ores, save those of much more than ordinary richness.

Inland from Bundaberg, again, rise the granite hills where innumerable veins of copper ore cleave the strata, and in the early seventies sustained a population of some thousands, bringing into existence the township of Mount Perry. The original mine bearing that name was for some years vigorously worked, its five reverberatory furnaces turning out over £60,000 worth of fine copper. A curious instance of the happy-go-lucky methods not uncommon in the early stages of mining industry in Queensland is afforded by the local belief in a tradition that the conductors of the enterprise were unaware that

their copper ingots contained a considerable enrichment of gold which was present in the ore. It is popularly alleged that the Great Swansea smelters, the Vivians, discovered the circumstance, and keeping the knowledge to themselves, purchased all the Mount Perry copper as it came on the market in England at copper rates, making a large profit by resmelting and separating the golden contents. The lodes on this mine have been extracted along their course over half-a-mile, and one of the shafts has followed the vein to a depth of nearly 900 feet, where it continues underfoot. Since the tremendous depreciation in the price of copper in the eighties, this mine has lain idle, its furnaces and machinery unused. Laden with a heavy financial burden, capitalists seem indisposed to touch it. Other mines in the neighbourhood, closed by the same incident, mostly remain neglected, their workings collapsing. But in one or two instances the improvement in the price of the metal has encouraged



Herberton.

a renewal of operations or the working of freshly discovered lodes. The general character of those is that they are of no great width, but have ore of high grade. The Harper's Hill and Fortunatus, formerly operated, and the Globe, a new discovery, are being worked on a small scale, and send to smelting works, in the south, ores which average about 25 per cent. of copper.

Still keeping back from the coast and proceeding northward, the country abounds in minerals. On the northern heads of the Burnett and Kolan, there are copper and gold; at Cannindah, veins of copper; at Ban Ban, copper; and, passing over to the headwaters of the Boyne, at Glassford Creek attention has of late been given to outcroppings which are so emphatic as to have gained the particular attention of men of means. Considerable exploratory work has been effected at heavy expense, and results have been regarded as satisfactory enough to justify the capitalization of one group of deposits at a million sterling,



British speculators being invited to subscribe working capital on that basis, and a railway being projected to connect the mine with the most accessible point on the coast line connecting Gladstone with the South. Somewhat to the N.W. lie the minor fields known as Cania, Monal, and Kroombit.

Returning to the Gladstone district and pushing north towards Rockhampton, a prospector would find inducements to try his luck almost everywhere. He would turn his back on Callide Creek, where beds of coal extending under a wide stretch of country, and proved to be of unrivalled thickness, have helped materially to revive the spirits and ambitions of the townsmen of Gladstone, who hope to have shipping resorting to their port for cargoes of the fuel.

Westerly from Mount Perry, and about 55 miles distant, lies the Eidsvold reefing field, a place where golden stone was discovered by a shepherd very shortly after the country was occupied for pastoral purposes, while the district was yet part of New South Wales. In fact, this is probably the scene of the first discovery of reef gold in what is now Queensland. But nothing came of it at the time. Alluvial would always attract a rush, because the first discoverers would be getting rich. But the existence of one reef, however promising, in a situation hundreds of miles from the nearest port, stirred no pulses in the early fifties. Even later, in 1862, when a Mr. Faulkner sent hence a parcel of  $1\frac{1}{2}$  tons to Sydney for treatment, and the stone yielded at the rate of  $8\frac{1}{2}$  oz. per ton, there was no interest taken. It was, no doubt, picked stone, for the reef was abandoned, and it was not till 1887 that close to Faulkner's old workings, more rich specimens being knocked out of a surface show of quartz, and other promising outcrops being found, the business people of Maryborough and Bundaberg took a hand in the game, and found backing for practical miners to give the reefs a proper trial. The results proved highly satisfactory in several instances, the Minerva Mine yielding, in 1898, 4,396 oz. of gold from 1,246 tons of quartz, and the average of the stone crushed running about 2 oz. to the ton on the field as a whole.

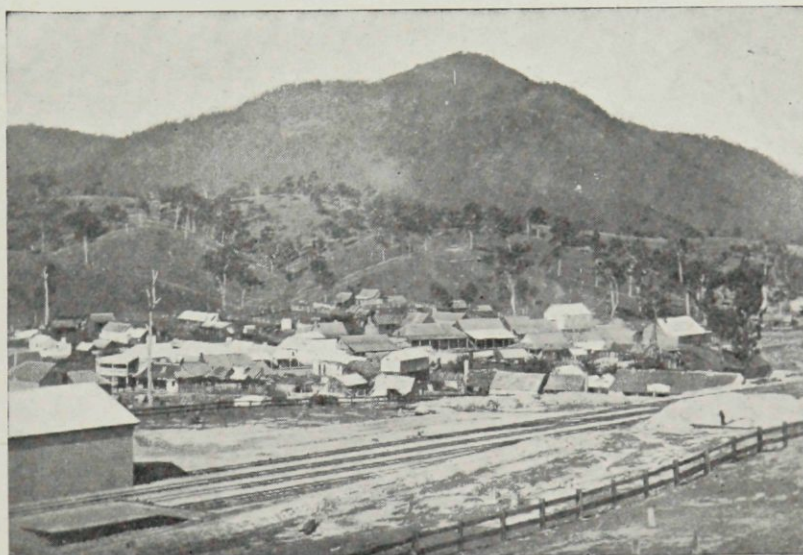
We may pause here a moment to dwell upon a circumstance suggested by this minor field. It is that apparently there is no particular rock in Queensland in which reefs and lodes or some form of mineralization may not be looked for. The Gympie "country rock," as it is called, is a slate or schist; at Charters Towers and Eidsvold the reefs occur in granite—syenitic—which is also the rock in which the copper lodes of Mount Perry occur. Whenever, in fact, rocks, whether igneous or sedimentary, have been affected by heat or movement subsequent to their original extrusion or deposition, and cracked or cleft by such influences, the cleavages appear to have been filled with siliceous, calcic, or other substances, charged with metals in varied proportions—sometimes one, sometimes another, sometimes in varying combinations with each other, and with non-metallic minerals such as sulphur and arsenic. Thus, wherever rocks are bared sufficiently for superficial examination, the prospector is generally justified in hoping. In

practice, however, the clue to the presence of metal in the rocks is generally sought by "panning" some of the detritus resulting from decomposition of the rocks, although, as regards lodes of the metals other than gold, there is so frequent an association with iron, protruding in the form of a rusty "cap" or comb of what is known as "gozzan," that the presence of a lode is so proclaimed by Nature without need for searching gullies after metalliferous "wash."

Continuing northwards, the prospector would tramp perhaps by Mount Alma, in which neighbourhood one of his forerunners unearthed from the alluvium a thin plaque of virgin gold as large as a dinner plate. Thence proceeding, the district is reached of which Rockhampton is the capital and Mount Morgan the dominating giant among gold mines.

It is curious, when thought of, that, when in 1858, over 10,000 gold-seekers, disappointed in their expectation of an extensive field at Canoona, were in the neighbourhood of Rockhampton in desperate straits, there was within a day's journey of them a mountain of which the entire peak was one mass of the richest golden ore. There was enough of the precious metal stored there to have supplied every

man of the 15,000 who are said to have at one time rushed Canoona with an income of £100 per annum for five years, as is now certainly known, and for a longer period which cannot yet be defined. Mount Morgan towered just out of their sight. Around them on every hand besides, within a radius of about 30 miles, the country had tracts which bristled with reefs, many of them rich enough on or near the surface to have given them immediate relief, which so large a proportion of the disappointed rushers stood in need of, while really rich alluvial deposits were not lacking. Only 15 miles from Rockhampton, the Crocodile rewarded the industry of about



Mount Perry.

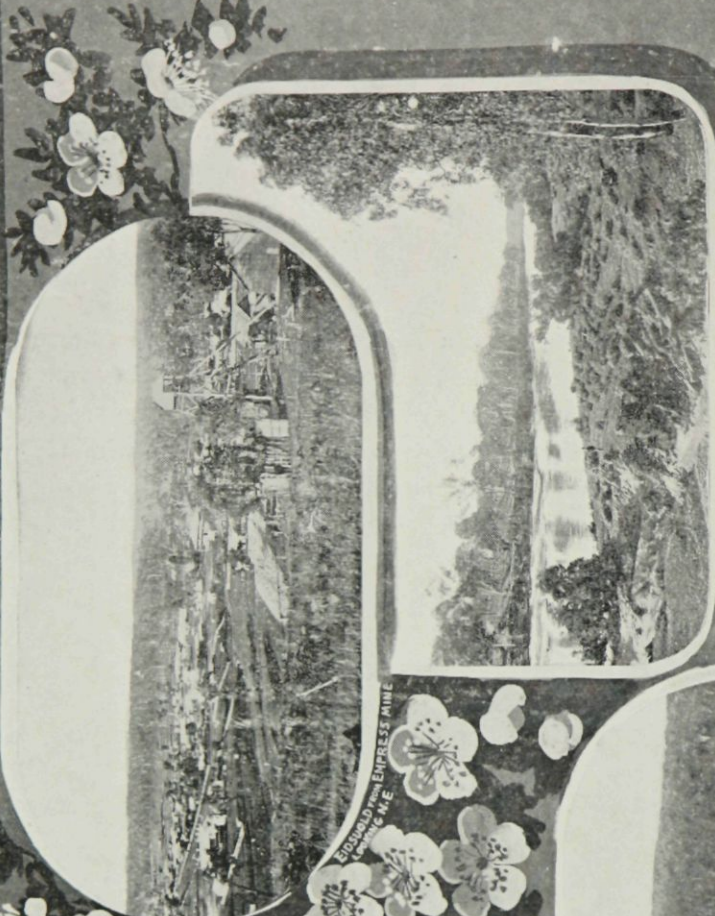
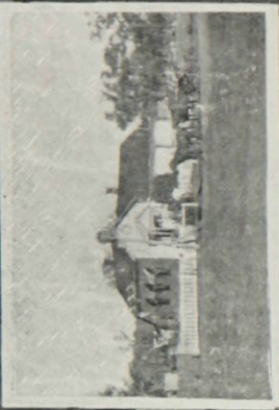
3,000 diggers with ample alluvial gold, about six years after the disastrous retreat of the Canoona rushers; and a reef discovered in the overlooking ridges has yielded satisfactory returns from large quantities of stone. At Rosewood, where the alluvial was very rich, and where the lode-filling is calcite in lieu of quartz, one reef yielded £10,000 worth of gold within a few feet of the surface, and more recently the Lucky Hit crushed 38 tons for 119 oz., and the latest discovery—the Rosewood Champion—in sinking its shaft 50 feet from surface raised 14 tons of the reef, which crushed for 111 oz. of very pure gold, and still later won 99 oz. from 17 tons of stone. Then we have Cawarral, spasmodically worked, and where quite lately, in 1900, one of the old mines—the Annie—has been taken in hand anew. Only a couple of miles distant, at Mount Wheeler, the second largest nugget found in Queensland was unearthed. But sufficient has been written to indicate to inquirers how prolific in gold is this region.

We cannot, however, pass by the world's greatest goldmine, much as it has been described and illustrated, without remark. The larger part of the property of this mining company was originally selected by one Gordon, for grazing purposes, and a very inferior grazing selection

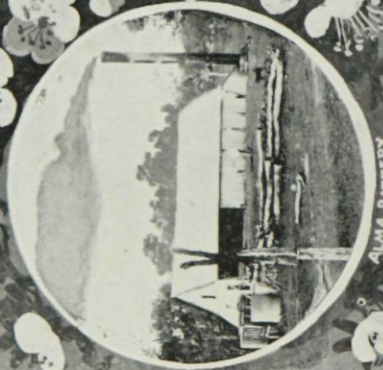


# EIDSUOLD GOLD FIELDS

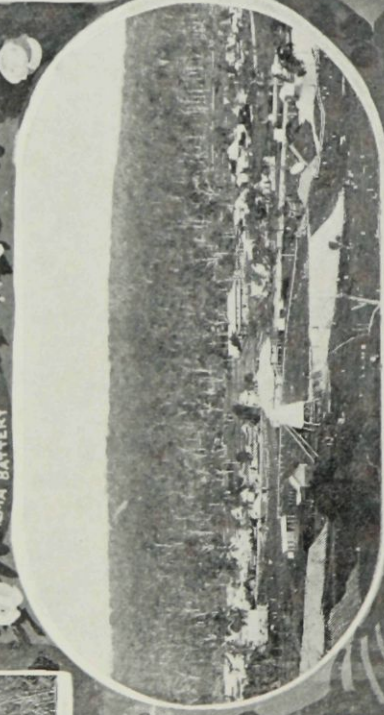
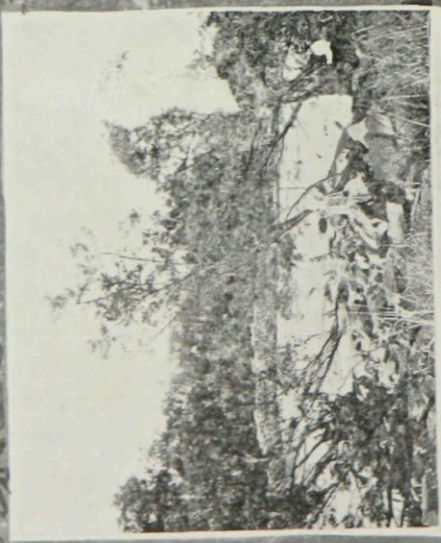
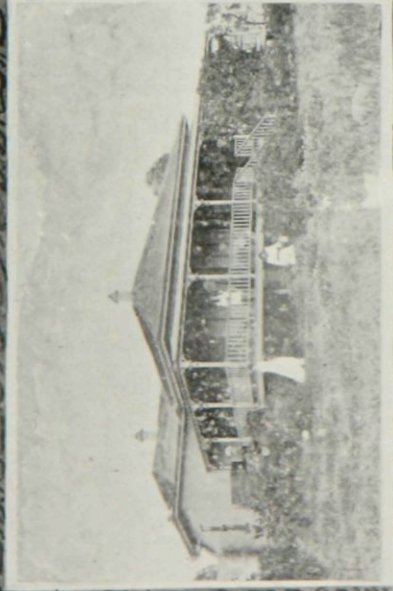
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EIDSUOLD GOLD FIELDS



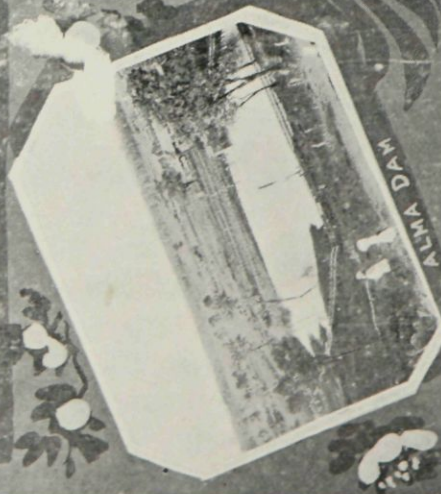
ALMA BATTERY



EIDSUOLD GOLD FIELDS LOOKING EAST



ALMA DAM



BURNETT RIVER



MINERVA MINE

Ashley



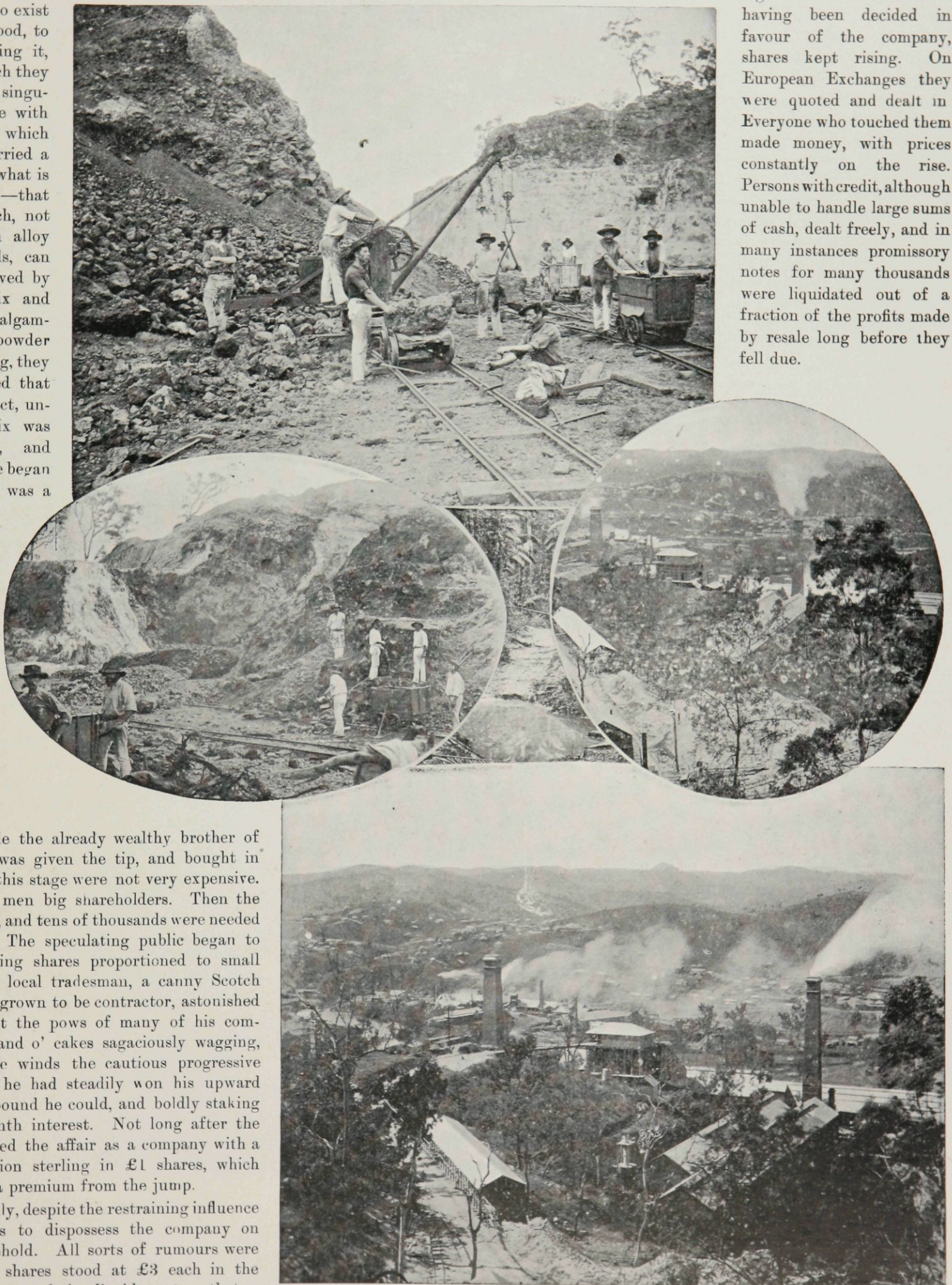
it must have been. It passed from his possession to that of three brothers Morgan, miners at Cawarral, who had been induced, by information respecting a silver-mine alleged to exist in that neighbourhood, to undertake prospecting it, in the course of which they discovered that the singular cap of ironstone with quartz admixtures which tops the Mount carried a good proportion of what is termed "free gold"—that is to say, gold which, not being locked up in alloy with baser minerals, can be separated and saved by crushing the matrix and panning off or amalgamating the resultant powder or pulp. Persevering, they presently ascertained that this singular—in fact, unprecedented—matrix was very rich indeed, and speedily other people began to believe that this was a big thing. The local man has generally first chance in such cases, and of all local men the butcher is the surest to have a bit of ready cash. In this instance a local butcher named Pattison bought an interest from the Morgans, early in the game, carrying with him an attorney and a

bank manager, while the already wealthy brother of one of the parties was given the tip, and bought in also. Interests at this stage were not very expensive. £1,000 cash made men big shareholders. Then the fermentation began, and tens of thousands were needed to get a look in. The speculating public began to buzz around, wanting shares proportioned to small pockets. Another local tradesman, a canny Scotch carpenter, who had grown to be contractor, astonished his friends, and set the paws of many of his compatriots from the land o' cakes sagaciously wagging, by throwing to the winds the cautious progressive methods by which he had steadily won his upward way, raising every pound he could, and boldly staking £26,000 on one-tenth interest. Not long after the proprietors registered the affair as a company with a capital of one million sterling in £1 shares, which became saleable at a premium from the jump.

They rose rapidly, despite the restraining influence of several attempts to dispossess the company on portions of its leasehold. All sorts of rumours were afloat. When the shares stood at £3 each in the market, it was rumoured in Rockhampton that a representative of the Rothschilds had visited and

exhaustively inspected the mine; and that that great money family was prepared to buy the whole property for seven millions sterling. The

legal contests with claimants having been decided in favour of the company, shares kept rising. On European Exchanges they were quoted and dealt in. Everyone who touched them made money, with prices constantly on the rise. Persons with credit, although unable to handle large sums of cash, dealt freely, and in many instances promissory notes for many thousands were liquidated out of a fraction of the profits made by resale long before they fell due.



Mount Morgan.



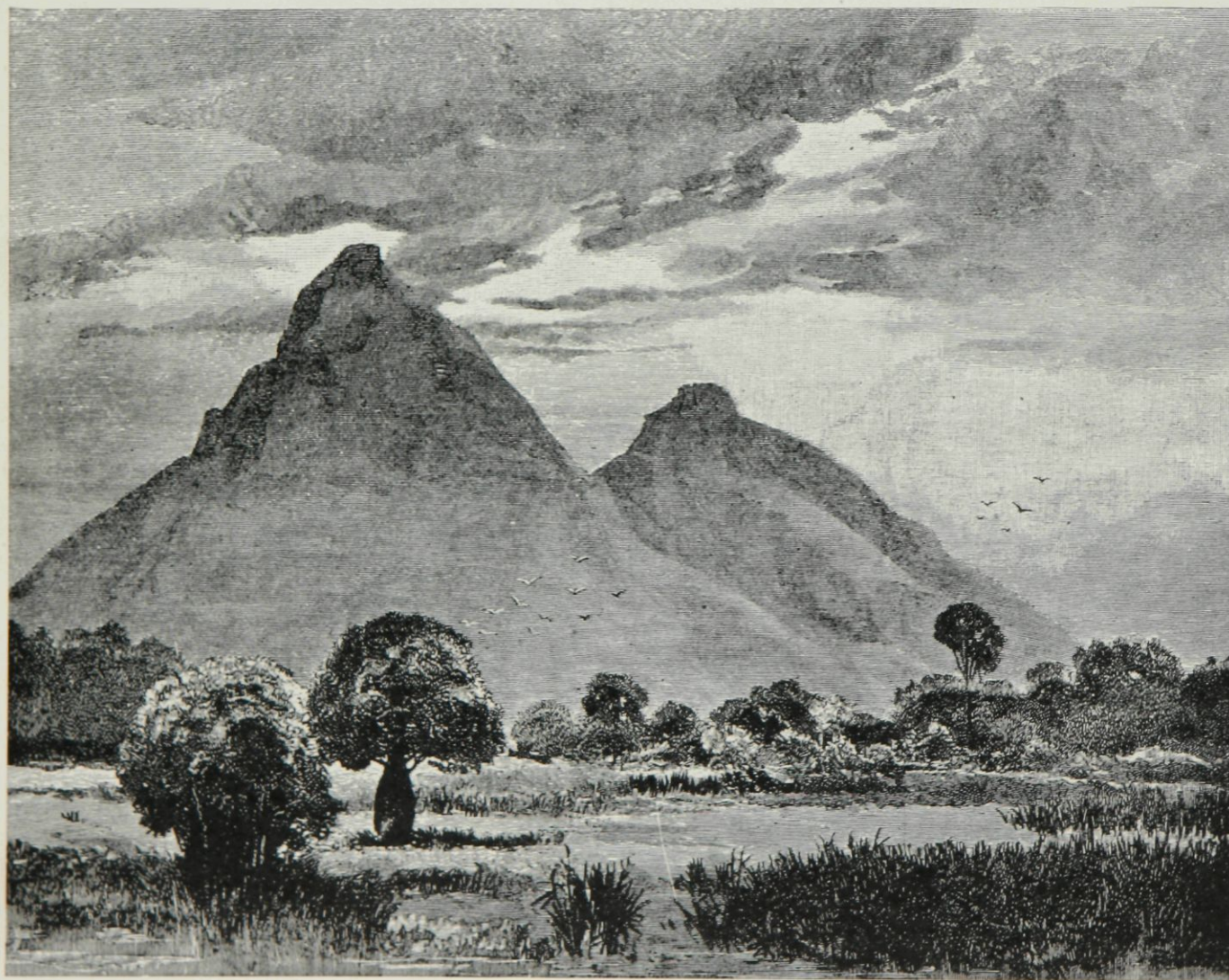
The inflation exceeded all reasonable expectation of what the mine could produce in dividends. At market rate of shares, its capital valuation ran up to fifteen millions, to sixteen, to seventeen, and, touching eighteen millions, the bubble, stretched to an attenuation beyond all possibility of endurance, collapsed with a suddenness which permitted the rash speculators for a further rise no chance of retrieving their position. Widespread ruin, chiefly among people of comfortable means who had been carried away by the general excitement in the hope of converting, by one masterly stroke, the competence acquired by a lifetime of sober economies and cautious investment into wealth which would make men of leisure of them, ensued. The shares crashed down even below their just value, falling to little more than £3. But since then they have slowly recovered. The richest stone on the crest of the mountain has been torn away, quarried as if it were ballast for ships or railway construction. The original works, where a process, borrowed from the laboratory, of extracting gold which could not be collected by the ordinary method of arresting it with quicksilver, was introduced on a large scale for the first time—a huge and costly, albeit successful, experiment—were augmented by later additions, with modifications of the first process. The auriferous deposits were subjected to methodical explorations and probings ahead of mining operations, and the value and extent of material to be operated on for years ahead has been ascertained. The result has been to establish a fairly steady price for the £1 shares, subject only to minor fluctuations; and the property is capitalised to-day, according to market quotations, at near four million pounds sterling.

iron ore or gozzan, was totally unprecedented. The Australian miner simply knew nothing resembling it. It might be a vast thing, or a mere rich gilding of a knob of mountain top. Presently, however, the Queensland Government Geologist, after careful study of the hill and workings, and consideration of the phenomenon, boldly announced that he was satisfied the whole mass on the hill top was deposited by the spume of a long-time extinct mineral spring, and that the gold had been leached out of mundic reefs—somewhere about—by contact with hydrochloric acid derived from the decomposition of chloritic rocks. One inference drawn by investors was that the auriferous deposit might exist in a sort of mushroom form, spouted up through a pipe which would represent the stem, and that consequently, when once the hill-top was quarried off, there was but a very speculative chance of finding any bulk of similar material below. But as the heart of the hill was probed by shafts and adits, and its secrets laid bare, Mr. Jack modified his opinion in one essential respect. While adhering to his theory of a thermal spring leaving an egg-shaped (not a mushroom-shaped) deposit of rich silicious deposits round its outlet, he declared himself “now quite satisfied that the gold might have been derived from pyritous beds such as exist below the mountain.”

Whether the source of gold supply were reefs or beds of pyritic ore, the possibility of these formations extending underground beyond the boundaries of the Mount Morgan Company's 720 acres of land has been considered sufficient warrant, when coupled with certain appearances, for the expenditure of money with the aim of striking those reefs or beds, or some consequential formation similar to the

Mount itself. Several companies have accordingly been formed to test this possibility, and energetic efforts are being made. The Mount Morgan Leasehold has thrust into the earth a finger to a depth of 280 feet, and has hewn a tunnel over 1,000 feet across the strata in search of the source of the richness of Mount Morgan.

Photographs of the great mine in almost embarrassing redundancy are available. The selection from these which we reproduce and print will suffice to give a good idea of the appearance of the mine itself, its vast premises for separating the gold from the monthly ration of 5,000 tons of ore, and the township which has been created to accommodate the battalions of men who by their industry render the wealth of the mountain available for the enrichment of its proprietors. These number—inclusive of timber-getters, teamsters, and others not actually operating on the mine—over 2,000 men: two battalions of infantry fighting the warfare of industry for the benefit of mankind. They



Spicer's and Roper's Peaks, Peak Downs.

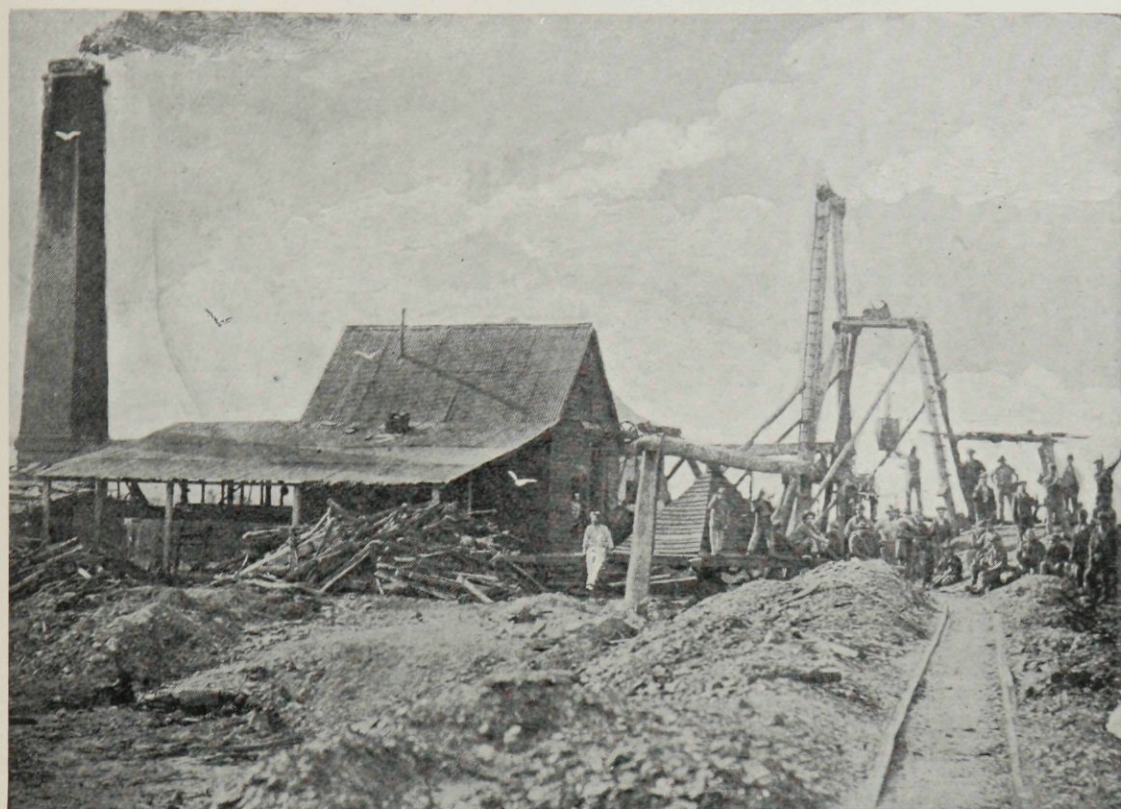
Firmness has been imparted to the price of shares by increased knowledge respecting the character of this enormous outburst of auriferous material. At first, no one knew what to make of it. The occurrence of gold in richest aggregation—some lumps carried gold at the rate of 3,000 oz. to the ton—amidst a mass of peculiar hematite

rip open the bosom of the hill, and stab its entrails; they tear it with high explosives, and raze its towering crest; and every blow struck and every shot fired is productive of some degree of happiness and benefit to humanity. This is indeed the truly noble army; theirs the true glory of conflict. Their exploits are productive of



no agonies; their feats tear no hearts of widows and wring no tears from orphans.

A fine tract of open downs country, amidst which rise some striking hills of conical form, was discovered by Leichhardt in the course of his famous overland expedition to Port Essington, and by



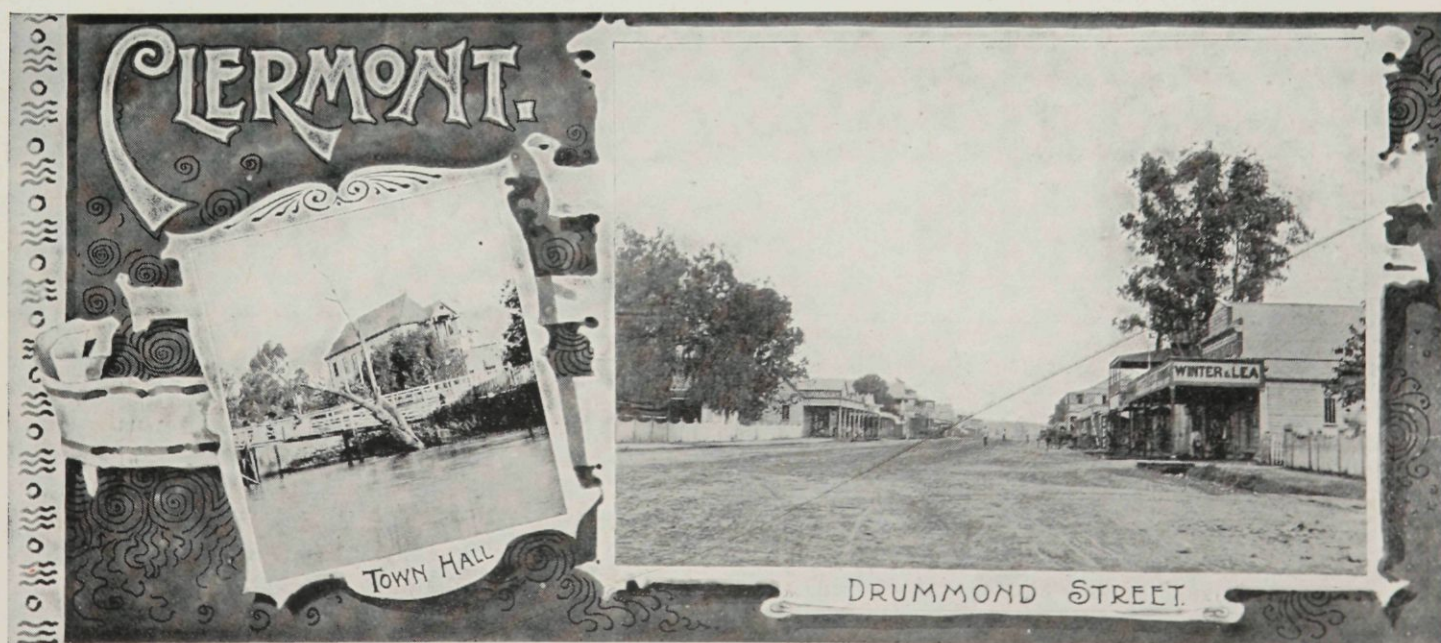
Old Copper Shaft, Peak Downs Mine.

him named Peak Downs. For pasture purposes it is of the first class, but, although large fortunes have been made by squatters there, the locality has been distinguished above districts far more extensive and important in a pasture way, by the great copper mine which for years yielded copiously. The capital of the Peak Downs is the little town named Clermont, at first unwisely planted below the flood level of a creek, but later removed to higher ground. Clermont is a prettily laid out hamlet, equipped with a mayor, a school of arts, and other modern conveniences. The existence of copper was discovered about 1860, and the lode proved of great productiveness. The expenses connected with the enterprise were so enormous that none but an exceedingly rich deposit could have supported them. Situated more than 200 miles from the coast, the item of carriage alone was tremendous. In the sixties bullock-drivers with drays and teams of their own had no notion of, and no necessity for, working for a mere living. Given fine weather, they made handsome incomes. Put they had always a certain risk, not so much of direct loss, but of detentions which spun out to months a trip which under favourable conditions

need only have taken weeks. Heavy rains were their afflictions. It was not only that flooded creeks compelled them to camp on a bank till the fords became passable, but the soil, once saturated, remained over long stretches of track so rotten that loaded drays sank to the axle; the bullocks, straining to extricate the vehicle, churned the ground to a quagmire, presently had no foothold, and were themselves in danger of being smothered in the bath of mud they had trampled.

In starting the work of copper mining and smelting at Peak Downs, very heavy outlay was necessary before any profits could be looked for. In the early sixties we have known as much as £60 per ton charged by bullock-drivers for carrying station supplies about 300 miles from the coastal store to the interior. The indications of a great deposit of very rich ore were, however, so impressive that adequate capital was forthcoming. The prospector Mollard sold for a trifle to a Mr. Manton, who happened to be mining for copper in an adjoining district, his rights; and Manton, securing a mile and a-half along the lode, proceeded to Sydney to invite capitalists to share in the enterprise. Manton was by nature a master in the art of the mining promoter—a trifle over florid perhaps, but pushing, irrepressible, and with a good deal of personal magnetism. He secured the co-operation of the late T. S. Mort and of William Smart, both men of means and of great influence in commercial circles in Sydney, and, the value of the lode having been demonstrated by preliminary explorations at their expense, additional land was secured and a public company floated in Sydney on the comfortable terms that,

of £100,000 nominal capital, the promoters received 66,000 fully paid up for their interest, while the remaining 33,000 was subscribed by outsiders. This gave an available capital of £33,000, and it was the consequent inelasticity of the company which, when a nip came, destroyed it. At the outset, however, affairs prospered. The output of copper in Queensland up to about 1870 was practically from the Peak Downs



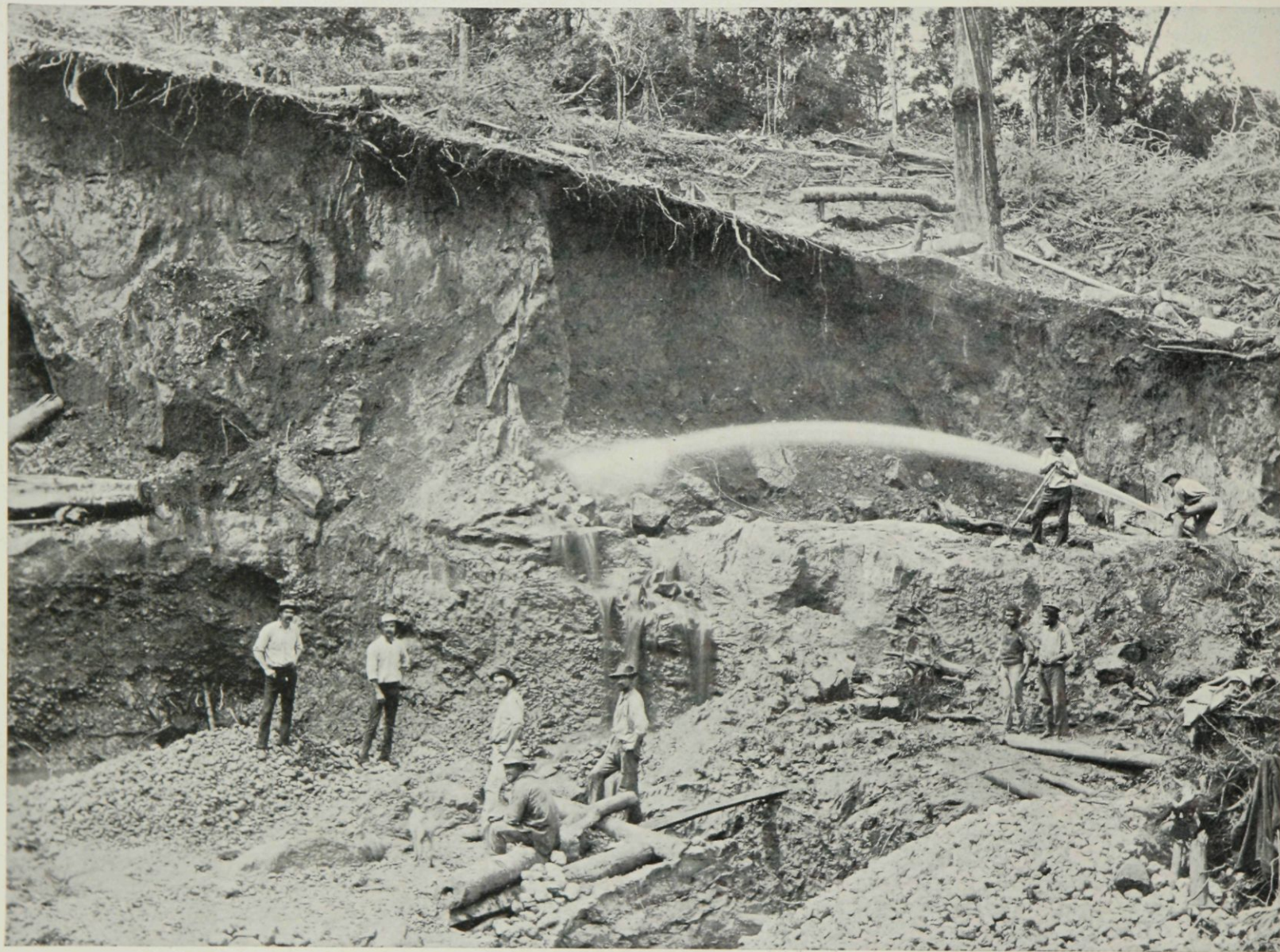
Mine alone. Later, the Mount Perry mines contributed, and there were parcels of ore from other sources. But effectively up to 1880 the Peak Downs Mine was the copper producer of Queensland. Furnaces and refinery were erected on the mine at immense expense, firebricks having to be imported from England and carted from Rockhampton



to the Peak Downs—about 250 miles, as the track wriggled at that time. Every bit of ironwork had to be brought up by the same costly means, and the copper ingots to be wheeled to the coast. But copper was worth money in those years; £100 per ton was a medium price. It rose to worth £110 in the early seventies, at which period the mine was fully developed and turning out its greatest quantities. The official returns of copper ore raised in the colony commence with 1 ton, valued at £50, in the year 1860. This was evidently a ton of specimen ore for company flotation purposes, as at the price it must have been fully 40 per cent. stuff—very rich ore. The following year 49 tons, valued at a fraction less than £30 per ton, speak of a beginning of regular operations. Thenceforward the production proceeds by leaps. The annual value jumps first from £50 to £1,450,

and an effort to revive the splendours of the past has been inaugurated since the abnormally depressed price of copper has had a healthy spring. There is no reason why the enterprise should not be successful, if adequate capital has been provided. There is now railway communication with Rockhampton. The little township of Copperfield, which sprung up beside the mine, had shared in its decadence.

But it is not only to its pastoral resources and its copper mine that the Peak Downs depend for prosperity. Clermont is the centre of an extensive area of auriferous country. Alluvial gold was discovered in the neighbourhood about the time when work was begun on the copper mine, and attracted a rush of about 10,000 men. Excellent



Russell River—Hydraulic Sluicing.

next to £10,332, to £60,000; after another year to £90,000, at about which figure it stands till 1871, when it bounds to about £170,000, with £190,000 the following year, fluctuating till in 1877 its final flare of brilliancy is a return of about £160,000. Next year the whole output of Queensland was but £34,000. The Peak Downs Company had broken down. Its capital, heavily drawn upon for early outlays, was called up. Become the sport of market-riggers, its profits were devoted to booming the value of shares by sensational dividends. No proper capital reserve was provided, and the mine was gutted, without care to keep development and underground exploration ahead of requirements. Consequently, when copper fell heavily in price, the crash was unavoidable. The company liquidated, and the mine was closed. The ruinous old works, the old shaft and winding plant remain,

results were achieved, and the usual scattering of the less successful over adjacent country proved that there is a wide area where golden patches exist. From that time forth the Peak Downs country has never been without some population engaged in goldmining, either working alluvial or the reefs which exist in numbers, with the common defect that, after a band of rich stone under the surface to 100 or 150 feet, a belt of poor quartz follows. In one or two instances this belt has been sunk through and good stone again reached. But a check from the cause stated has generally been conclusive, so far as pioneer mining parties are concerned. Down to 150 feet, the simplest and least costly appliances for raising rock from the bottom is adequate. A "whip"—a simple arrangement of pulleys, worked by a horse—suffices. But for deeper working the whip must be replaced by more efficient and costlier mechanical appliances, especially as at just about



that depth, in most localities, the drip of water from the strata becomes too considerable to be coped with by mere baling. The stage when steam gear becomes essential is, in a multitude of reef-mines, the stage when abandonment occurs. Especially because this, the water level, so termed, is just the depth at which, commonly, a change occurs in the nature and character of the ores.



School of Arts, Coen.

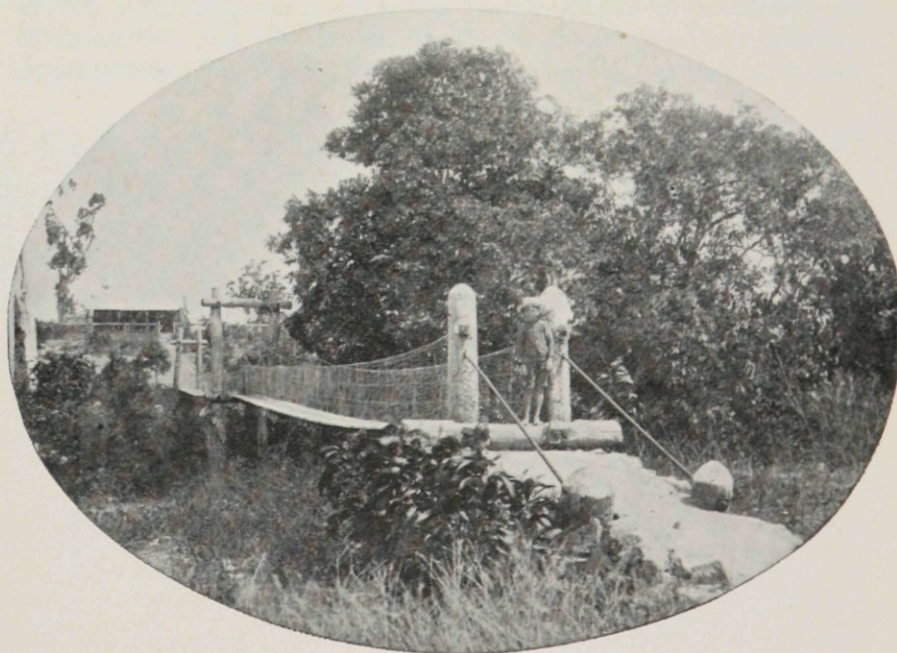
We have to be content with mere mention of fields, each with characteristics of its own, and each fraught with interest and importance, present and prospective, sufficient to fill singly a much larger volume than this. Thus, flitting by Nebo and Mount Britten Gold Fields, on feeders of the Isaacs River, itself an affluent of the Fitzroy, at a locality westerly, where within a year of discovery over £17,000 worth of gold was gathered from the alluvium, we leave behind and on both hands minor fields, and find ourselves on the Normanby, inland from Bowen. Here good alluvial led to discovery of over a score of reefs, likely after long neglect to be tried in earnest, as machinery has at last been provided. We are now reapproaching Charters Towers, the premier reefing field, already illustrated, by way of the Ravenswood, a region of alluvial and reef gold, which has experienced, perhaps more sharply than any other in Queensland, the vicissitudes due to the period of arrested development consequent on rich "free-milling" quartz being replaced below "water level" by ore complicated by the alloys which "sicken" mercury and interfere with the separation of gold from the crushed quartz by simple battery amalgamation. Numerous reefs, large and rich, were here abandoned for years in consequence of these difficulties. But scientific processes are at last sufficiently improved to permit of complex ores being dealt with on the spot without the prohibitive expense of conveyance to smelting establishments. There has been consequently a sort of scamper to peg out afresh reef leases once prolific in free gold and then abandoned. All indications point to such a revival of industry as will restore the Ravenswood field to that prominence among mining centres which it formerly held.

The neat little township, long rather lugubriously quiet, already reassumes a brisk and bustling aspect, and once more its inhabitants entertain a hope of rivalling—perhaps surpassing—Charters Towers.

The main Dividing Range approaches, as has been already mentioned, the Pacific coast at the base of the Cape York Peninsula, and rears to a considerable elevation. From its steep sides and ravines, matted with tropical scrub, flow the rivers which Dalrymple discovered from the sea, and some minor streams. What may underlie

the heavy deposits of soil along the lower course of these streams is for the present matter for theoretical speculation. But where the detritus higher up stream is less deep, and on the slopes and terraces of the range itself, to an elevation of over 2,000 feet, gold is present under the alluvium over very extensive tracts. The areas proclaimed as goldfields in these neighbourhoods, accessible from Cairns and from Geraldton, a growing township and port on the Johnstone River, are:—Russell Gold Field 133,070 acres, Mulgrave 192,000 acres, and Jordan 40,960 acres. These places being within the region of the heaviest and most frequent rainfall in Queensland, perennially running brooks flow from the mountains, cascades are common among the features of the landscape, and hydraulic mining—a method entirely out of the question in almost any other part of the colony—is feasible, and has already been resorted to, to some extent. But here again the need of capital for initial expenditure retards progress. The localities are little known even in the Southern cities of Australia, and, unless some discovery be made of sensationally rich and shallow deposits to excite attention and give the bold advertisement to the districts which a big rush ensures, the treasury buried among the scrubs of these regions will probably be reserved, for the most part, for the enrichment of later generations. Still further north, on the Stark, beyond Cooktown, both alluvial and reef gold is mined, as yet, on a small scale.

Thus far, it must be observed, all the goldfields passed under review are situated on the eastern side of the Great Dividing Range, on the Pacific slope of Queensland, in fact, with the exception of the Palmer and Hodgkinson, which, with those which follow, are on the heads of rivers flowing into the Gulf of Carpentaria. Of these the Coen Gold Field is farthest north of any up till now discovered in Queensland. Indeed the auriferous country here sits astride of the Dividing Range, between the 13th and 14th parallels of S. latitude; and on the Pacific side again, at an altitude of 2,000 feet, which tempers the heat, and gives a climate not only endurable but pleasant, lies the Rocky River field, with a proclaimed area of nearly 90,000 acres. The reefs here have yielded surface stone of surprising richness. Records are 90 tons, packed mostly on horses over the ranges to battery at Coen, which justified so costly a method of



Suspension Bridge, Coen.

conveyance by yielding 766 ounces of gold. Another lot from Brown and Slattery's reef, 27½ tons, yielded 365 ounces; and yet another 466 ounces from 68 tons of quartz. Here evidently is a region crying out for investigation, with loud promise of ample reward for any attention devoted to it. The whole of Cape York Peninsula appears likely to



abound in minerals, since proved goldfields lie on both sides of the Dividing Range, which is a sort of backbone. The Coen has yielded returns equally alluring from small parcels; 93 ounces of gold from 5 tons of Springfield Prospecting Claim is quite an intoxicating result. On the whole, however, the average is more sober.

We have now to turn southward again; keeping on the Carpentarian slopes, and, overleaping the Palmer-Hodgkinson fields, already mentioned, we arrive at the upper watersheds of rivers which disembogue in the Gulf of Carpentaria.

But, before definitely quitting the Pacific waters, it will be convenient to plant ourselves, in imagination, upon the ridge which divides the northernmost head of the Herbert River from the Carpentarian streams. From that point of vantage we look on the one hand upon the tract of which Herberton is the earliest township, and on the other upon the country of the Walsh, Einasleigh, and other Gulf rivers, regions which are stored to an extent apparently not surpassed by any equal area on the earth's surface with regard to deposits of tin, in the alluvium and in lodes or massive subterranean bodies, and also fecund in lodes of copper and silver. The area thus mineralised, and known as the Walsh and Tinaroo Mineral Fields, extends over about 20,000 square miles, and is the scene to-day of greater activity in mining for metals other than gold than is exerted on any other part of Queensland. This bustle is to a great extent due to the enterprise of a private company which, having acquired the ownership of over 100 leases of mineral land, on which remarkable outcroppings, at and near Chillagoe,

of lodes of copper and of silver ores occur, has constructed at its own expense an extension westerly from Mareeba to its furthest mining group at Mungana, an extension, over 100 miles long, of the Government

railway from Cairns, which has so long stopped short at Mareeba.

The Walsh and Tinaroo districts abut upon the Etheridge Gold Field. Here exists an immense extent of country, seamed and sprinkled not only with auriferous reefs and alluvial deposits, but with an extraordinary variety of other metals. Some 9,000 square miles—more than a



Georgetown.

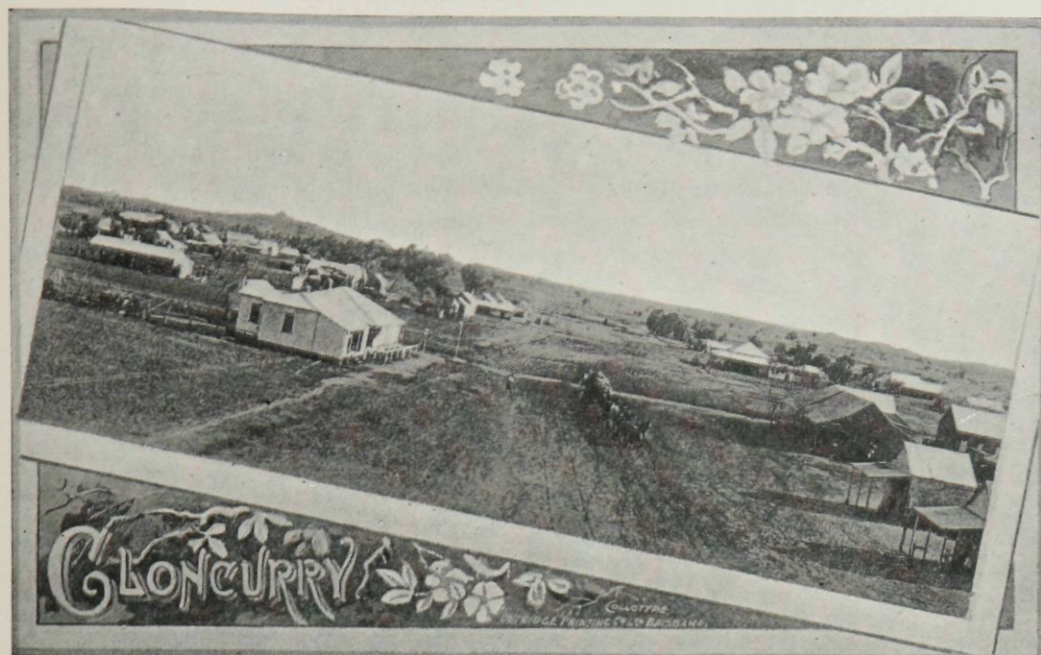
fourth of the area of Ireland—is thus mineralised. When it is understood that the population does not exceed 1,800 souls, there can be no difficulty in comprehending that the mineral wealth of the region has been barely scratched during the eight-and-twenty years which have elapsed since mining was first commenced there. This population is disseminated among numerous little nuclei of villages, the most developed being Georgetown, on the Etheridge River, which gives the dominating name to the whole district, overshadowing Charleston, 35 miles to the south, and even Gilberton, 116 miles away, where lodes of the ores of silver, silver-lead, and copper are numerous. Tin also exists on the Einasleigh River; bismuth on the Percy. This reminds us that a mine of bismuth, said to be the richest in the world, lies in a state of suspended animation, due to financial complications having no connection with the mine itself, not far from Ravenswood, on the Pacific slope. To return to the Etheridge and its neighbour, the Woolgar, metals are not the only precious minerals which have been proved there to exist. The presence of gem stones has been ascertained by the unearthing of small specimens of ruby, sapphire, and diamond. Difficulty of access hampers the development of this region, truly remarkable even in Queensland, where, as the reader must already have learned, mineral indications are the rule rather than the exception. From a seaport of the East coast, the handiest access to Gilberton, near the southern end of this vast group of mining fields is



Enterprise Mill, Croydon.



rail 148 miles from Townsville to Pentland, and thence by bush road 230 miles. It is obvious that the expense of bringing machinery to a field of which even the most accessible part is thus remote from foundries and engineering works must far exceed the first cost of a



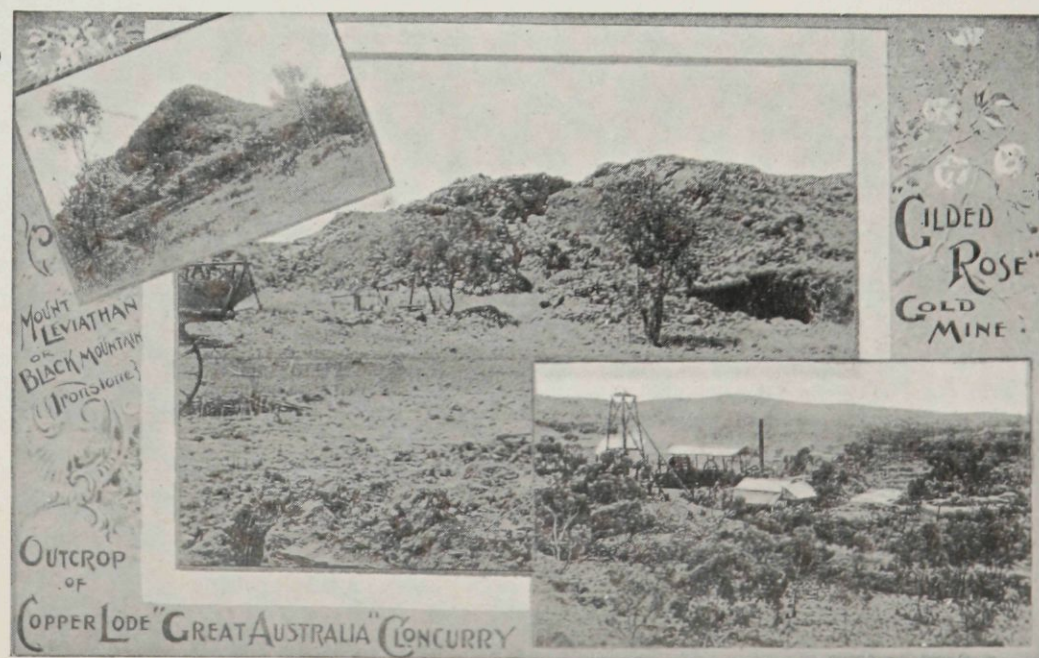
plant. At Georgetown, access is scarcely easier. From Cairns a railway brings goods or travellers as far as Mareeba, 46 miles; and thence recourse must be had to coach or dray for 216 miles more; or, as an alternative, a voyage may be made by steamer up the Eastern coast, through Torres Straits into the Gulf of Carpentaria to Normanton near the bottom of the Gulf, by train from Normanton, 94 miles, to Croydon, and thence by road about 100 miles. The district is healthy for human habitation, and the climate in the higher portions tolerable in summer and delightful in the winter months. There is interspersed with the rocky regions ample land of the highest excellence for agriculture and fruitgrowing. The citrus fruits here flourish, and, although the staples of food have to be brought from the coast, the residents have local supply of vegetables and fruits. The annual gold production of this group has for about twenty years maintained a fairly even level. In 1893 it touched its highest level with 29,385 ounces. The average since 1880 has been close on 24,000 ounces per annum. About 1,000 metalliferous reefs are said to have been located in this very extensive area.

The Croydon Gold Field, the situation of which has been already stated, having connection by rail with a seaport—albeit one of the most remote from the greater centres of Australasia or the world's industrial activity—although discovered to be auriferous years after the Etheridge, has been much more rapidly developed. The comparatively easier accessibility has had much to do with this, for the equipment of a mine within a few miles of a railway station is a very different matter from providing machinery for one 250 miles distant from all convenient means of approach. Gold was first seen here when two men—miners on the tramp—were employed by the owner of Croydon cattle station to sink a well. But it was not till some years later, in 1885, that a reef—since proved highly prolific of the precious metal—which actually ran across the main track from Normanton to the Etheridge, was noticed and broken into. Of course, there was no railway then, and the first progress was slow, especially as the attraction of a considerable extent of shallow alluvial was lacking.

Although, in official returns, the output of the Woolgar Gold Field is grouped with that of the Etheridge and Albert, the first-named field is quite a separate place. It is situated to the south of the Gilbert,

on the other side of a tableland of desert sandstone forming part of the Gregory ranges, and, besides good alluvial, upwards of fifty reefs have been worked here, the average of the yield being about an ounce to the ton. The water conditions here are peculiar, the base of the tableland being dotted with innumerable springs which feed running brooks. The place is no more accessible than the Gilbert, and awaits its future.

A wide gap of country, not proved to have any considerable metalliferous portions, interposes before—about 250 miles westerly from Woolgar, about 280 miles from the nearest point on the railway from Townsville, on the Pacific Ocean, and about 200 miles south from Normanton, the most accessible port on the Gulf of Carpentaria—the striking mineral masses of Cloncurry are reached. Within a radius of 70 miles, gold, both reef and alluvial, has been found; but it is as a copper-field that Cloncurry stands pre-eminent. Here again we have an instance of natural opportunities neutralised by lack of artificial conveniences for turning them into account. The huge outcroppings of copper ore at Cloncurry did not fail to attract the attention even of the pastoral explorers who first inspected this locality in connection with its stock-carrying capacity. It cannot have been later than the year 1870 that Messrs. Sheaffe and Henry, pioneer squatters, broke into these protuberances, and brought to Brisbane and Sydney parcels of copper ores, red oxides, and carbonates, including some malachite, of very high percentage. There is, so far as is known, no place in Australasia, and probably not many in the wide world, where high-grade copper ore obtrudes itself in such masses as it here does. Extensive areas were secured as freehold immediately after the first discovery, and considerable operations by trenching and sinking have given confidence in the permanence of the deposits. The outcrops resemble more nearly those which distinguished the huge silver-bearing lode at Broken Hill than anything else, save perhaps the crest of Mount Morgan. But here one hill is ironstone, another practically a mass of oxidised and carbonated copper ores. But no benefit has yet accrued to mankind from these immense treasures. The locality has no forest at hand to provide fuel for smelting. Difficulties as to fluxes also present themselves, and not only the distance from sea carriage, but the remoteness of the nearest port from those parts of Australia or of Europe where



smelting works exist, have rendered hopeless all idea of sending away crude ore while copper fetched low prices. The elevation of the price of the metal during the last eighteen months or so has apparently not sufficed to bring about any decisive measures for dealing with these



immense stores of ore, which, unless an effort to secure Parliamentary sanction for the construction by private enterprise of a railway to the coast, now before the Legislature, be successful, may still have to await the realisation of the late Sir Thomas Mellwraith's conception of a great trunk line of railway connecting the most westerly extremity of the Southern line with Point Parker, on the shore of the Gulf of Carpentaria, as such a line would, as a mere matter of judgment, undoubtedly be taken through Cloncurry, for the sake of the mineral and other freights which those mines and the population, which operations on them must attract, would furnish.

Leaving the metals, there are still minerals which claim attention. Of coal, the source of so much of the industrial activity and wealth of Great Britain, the territory of Queensland has huge stores, distributed widely under the surface of her territory, and to the known beds others of later discovery are constantly being added. The vast extent and enormously wide distribution of the carboniferous strata of Queensland are absolutely bewildering, and almost defy attempts at condensed description. A few extracts from official reports and statements are all that can be here given by way of indicating the immense area whence coal could be mined, were markets

accessible and population sufficient for the work. It is probably not extravagant to conjecture that the entire male population at present in Queensland would be far too few to man the coal mines, were conditions as to demand, means of transit, and local consumption similar to those which exist in Great Britain. Of the Moreton and Darling Downs coal beds—which are regarded as geologically identical, the main range which severs their continuity being regarded merely as an intrusion of igneous rocks — Mr. Jack, lately Queensland

Government Geologist, observes in "The Geology and Palæontology of Queensland and New Guinea":—"An area of about 12,000 square miles in the south-eastern corner of Queensland is occupied by the Ipswich Coal Field." The Hon. A. C. Gregory, C.M.G., the well-known explorer of N.W. Australia, and successively Surveyor-General and Government Geologist of Queensland, remarks that these strata, "bounded on the N.W. by the Devonian rocks of D'Aguilar's Ranges, a little to the west of Brisbane, extend with little interruption westward for more than 150 miles." But this is a trifle, contrasted with other localities in the colony. The Burrum Coal Field extends, according to Mr. Jack, "from the mouth of the Kolan River to Noosa Head." That field appears to have been traced far up the valleys of the Mary and Burnett Rivers. Again, there are the beds which have been bored into at Callide Creek, some 50 miles W. by S. from Gladstone, where, in a shaft only 60 feet deep, Mr. Rands, F.G.S., the present Government Geologist, inspected a seam 30 feet thick, of clean coal free from bands. There being in this neighbourhood no surface outcrops, the extent of the bed could not be ascertained. Only other borings or shafts a couple of miles away in one direction and half-a-mile in another showed a continuity of strata and no signs of disturbance.

But we must condense. A vast field seems to occupy the whole basin drained by the Fitzroy River, abundance of coal having been found outcropping alike on the head waters of the Dawson and of the Isaacs and Suttor. There is coal at Clermont, coal inland from Townsville; even on the Palmer there is coal, and nearer Cooktown it has been found. One matter connected with our subject, and relating to prospecting for coal back from Cooktown, is so remarkable an illustration of the stringent limitations on enterprise which absence of support from capital imposes on speculative enterprises in remote parts of Queensland, and of the extent to which pluck, industry, and determination avail as substitutes for financial support, that it deserves to be rescued from the comparative obscurity of a paragraph in an official Blue-book: "A prospecting shaft was sunk, in 1892, on the north side of the railway (Cooktown to Laura), near the 38-mile peg, by Messrs John and Colin Christie. The shaft was 246 feet 2 inches deep, and a bore was put in from the bottom of the shaft to a depth of 99 feet 7 inches. The attainment of a depth of 246 feet, by two men, with a hand-windlass only, is the greatest achievement of the kind I have heard of in Australia."

The foregoing is not nearly all that can be told of the existence

of coal in Australia. There is coal of magnificent steaming quality in the Broad-sound country; there is coal under the north-western plains and Downs, far in the interior, at Tambo, at Bungeworgorai Creek, at Winton, and on the Flinders River, which empties into the Gulf of Carpentaria. In fine, Mr. Jack announces that, "for aught we at present know, the Western Plains may turn out to be one vast coalfield, covered more or less deeply with newer rocks, and with a few ridges and islands of older palæozoic rocks, which are goldfields."



Lucknow Opal Field.

Descending now from the prophetic visions of inordinate national wealth, which a survey such as the foregoing inspires, to the sober realities of pre-ent-day accomplishments, the total output of Queensland collieries, from 1860 to 1899 inclusive, has been but 5,658,816 tons. For the year 1899 the production was 494,009 tons, derived almost exclusively from three groups of active collieries—viz., those of Ipswich, 373,655 tons; of Wide Bay (Burrum), 111,414 tons; and of Clermont, 8,940 tons.

It remains only to refer readers who may have a particular desire for fuller information relating to coal in Queensland to a most exhaustive compendium of all available information embodied in a paper by Mr. Fryar, Inspector of Mines, published as an appendix to the Annual Report of the Under Secretary for Mines for the year 1899. From that paper most of the particulars above given have been derived.

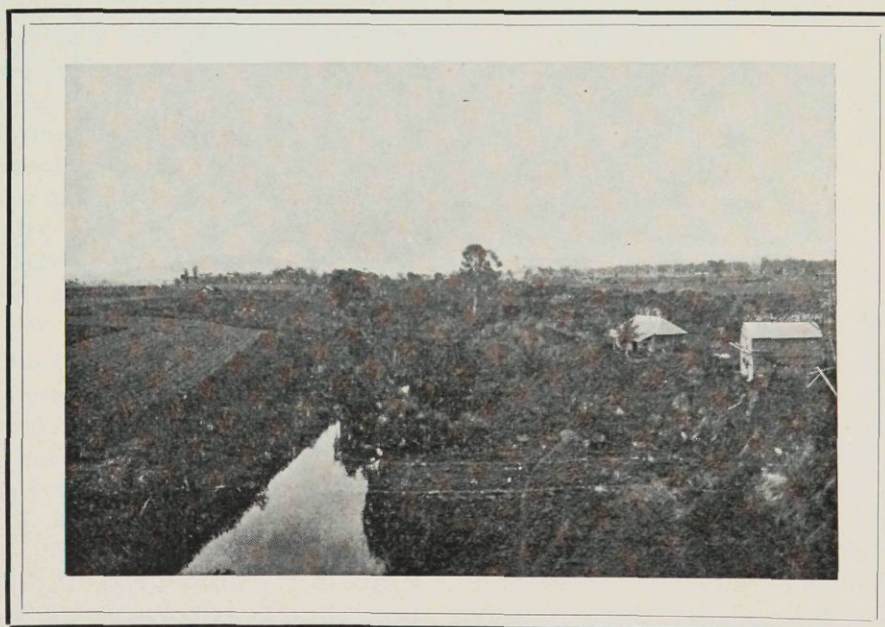
We have already mentioned that gemstones, such as diamonds, rubies, and sapphires, have been ascertained to exist in alluvial drift on the Etheridge and other goldfields. There is, however, another precious stone which, unlike these, has been found in quantity and quality sufficient to give it a place of importance among Queensland mineral



productions adequate to justify separate mention. The Queensland opal has established its right to a place on an equality at least with the best Hungarian gem. The opals are found, according to Mr. Jack, "in nodules of ferruginous silicious ironstone, either in the Desert Sandstone formation or denuded out of it, and lying on the surface of the underlying Rolling Downs formation. The whole of the area over which the Desert Sandstone extended—the Western half of the colony—might, therefore, be given as the locality in which opal-mines are undeveloped." In brief, opal may be looked for in almost every part of the Western interior. Meanwhile, it is mined chiefly on the Bulloo, in the extreme South-west corner of the colony, at Erromango or "Opalopolis," and at Fermoy or Opaltown. The two latter places lie at very long intervals to the northward of the first-named, Opaltown being not very remote from Winton, the present terminus of a railway starting from the seaboard at Townsville.

The first recorded production of opals was in 1890, when gemstone valued at £3,000 was raised. Since then, to the close of 1899, a total value of £111,000 has been reported. The search for the stone is as yet of the most perfunctory nature, and has been severely restricted by the prevalence during recent years of terrible drought, which has ravaged the belt of country to be prospected. There are but a few score men who make opal-mining their regular industry. The gem is sought intermittently by Western shearers during their off season.

An inquiry for wolfram has led to some commencement of activity in mining that metal, but as yet only worth passing reference. We must not, however, close this rapid review without mention of iron, that metal the possession of deposits of which has so substantially aided Britain in her industrial progress during the century. Probably not a ton of pig iron has yet been smelted from Queensland ores. Yet of iron ores there exist deposits of remarkable character. Near Ipswich, in immediate proximity to the coal measures and limestone beds of that favoured locality, in a serpentine formation, chrome iron is found in vast abundance. The late Richard Daintree, Government Geologist, states:—"It is in close proximity to the Brisbane River, and crops out in huge boulders for 200 yards. . . . This is said to be one of the largest deposits of chrome-iron ore in the world." Again, at the Cloncurry, there are huge masses of iron ore. Mr. Jack, writing on this subject, said:—"The most striking features of the country are mountains of pure specular and magnetic iron ore. One of these, Mount Leviathan, is about 200 feet high, and a quarter of a mile in diameter at its base. It is singular to reflect that these deposits, which, if they were located in England, would be colossal fortunes to their owners, are at present absolutely valueless owing to their geographical position." This, of course, does not apply to the ore deposits close to the Brisbane River, which seem certainly to offer every attraction for working which situation, and proximity to fuel and flux, could afford.







**CONSIDERING** the immense extent of the colony, the extraordinarily scattered condition of a great proportion of its population, the nomadic and adventurous habits of classes, such as diggers, drovers, shearers, and bush-workers in general, it might not unreasonably be expected that, at least in the localities remote from centres of population, there would exist some degree of lawlessness, accompanied by crimes of violence and rapine. So far, however, is this from being the case that there is probably no part of the Queen's dominions where order is better observed and such spasmodic crimes as occur from time to time more certainly punished than in Queensland. In the main this fortunate condition must, beyond all doubt, be ascribed to the innate and traditional preference for orderly life by the people who constitute the population of the colony. As has already been intimated, while the site of Brisbane was used as a penal depôt, free settlers were, save in very exceptional instances, excluded from the seaboard of the territory altogether, and it was not until the whole of the bond denizens of the place had been swept out and removed altogether that the first influx of the ancestors or forerunners of the present population began to lay the foundations of a permanent community. The very first body of free selectors—and these were co-temporary with the convict establishment—were a few German missionaries, of the Moravian sect, who, accompanied by a handful of lay-brethren, artisans, or laborers, and by their wives and some children, aimed at Christianising the aborigines.

This little party was at first permitted to occupy the buildings at the officially abandoned settlement at Redcliffe (Humpy Bong). Here, however, they soon found that their very existence was imperilled by attacks of their proposed converts. After several of their number had narrowly escaped destruction, they were permitted to remove to a situation comparatively less exposed. A place was allotted to them six or seven miles out of Brisbane Town, on a spot of their own selection, where a ridge of rich red soil gave promise of successful cultivation to minister towards their own support, and where, in fact, they were thus enabled to subsist, although the original purpose of their mission did not prosper. "German Station," on the road to Sandgate, is now almost forgotten, the old designation having been lost in the name of Nundah, now almost a suburb of Brisbane and a station on the Brisbane-Sandgate railway line. From these worthy Pilgrim Fathers, a considerable number of descendants are among the earliest native-born Queenslanders. Prior to Separation from N.S. Wales,

the overland invasion of the Darling Downs by pioneer squatters from N.S. Wales occurred. And the peopling of the seaboard parts was commenced by some immigrant ships from England under the auspices of the Government of N.S. Wales. Very notable acquisitions of new settlers were the immigrants sent out by the Rev. Dr. Lang, and landed at Fortitude Valley.

In the very early days of pastoral settlement, when occupation had extended no further than to the Darling Downs, the valleys of the Brisbane and other streams flowing into Moreton Bay and of the Mary River, Dr. Leichhardt, visiting among the stations, was so impressed by the social and educational status of the proprietors of the "runs" on these advanced frontier posts of civilisation that he referred to the subject with astonishment in his Journal. He found, as he records, gentlemen who had in their youth made the tour of Europe, some who had received part of their education abroad; many who could converse in the German and French languages, some who were even familiar with the literature of Germany and of France. His hosts, he observed, were in frequent instances, men of family and culture. This class of colonist was recruited by the appointment, to various official positions, both before and at Separation, of gentlemen whom successive Governors, then exercising more influence in the matter of appointments than now, had the inclination to make appropriate provision for. It was thus that the first Speakership of the Legislative Assembly was placed in the way of the late Gilbert Elliot, a descendant of the heroic defender of Gibraltar. Thus also the widow of Colonel Barney became Postmistress of Brisbane, and Colonel Gray, already mentioned in connection with the abortive first attempt to establish a settlement at Gladstone, was appointed in 1853 Police Magistrate at Ipswich, a post which he held—save for an intermission of three years, during which period he was the first Usher of the Black Rod in the Legislative Council—till his death in 1873, carrying to his grave the esteem and veneration of the people among whom so long a proportion of the closing years of his life had been passed. As Colonel Gray was a type of a class of men who filled similar positions during the early days in Queensland, and especially as he left to inherit his reputation and imitate his principles a family of children of whom one occupies to-day the most responsible position under the Government, that of Commissioner for Railways, a brief sketch of his career will not be inappropriate here. Born in Edinburgh in 1786, Charles George Gray obtained a Commission as Ensign in the 77th Regiment at ten years of age. This was an instance of an abuse common in Scotland at that period when infants

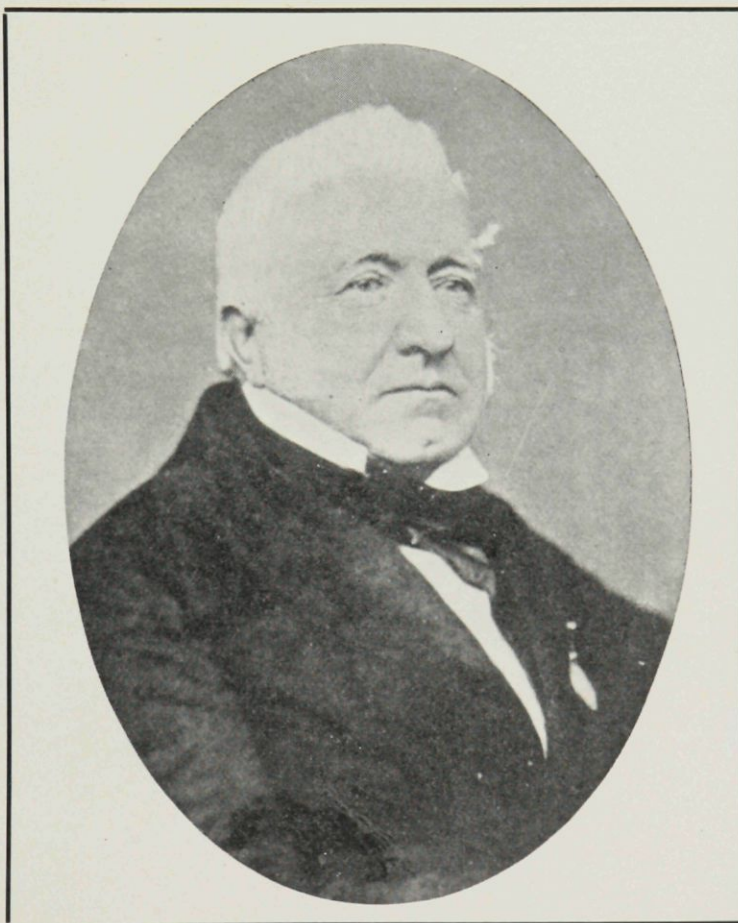


of "good" family had conferred on them the appointments, and, what was more important, the emoluments of various ranks in the service of the Crown, and which forms the point of an old story of an English visitor to a Scottish mansion being surprised one morning to hear a nurse call to the cook to make haste, because "the major's greeting for his parritch" (crying for his porridge). At the maturer age of 14 a lieutenancy was purchased for the boy in the 78th Highlanders, but he went on half pay to complete his education, and it is more than probable, considering the methods of Scotch Dominies at that time, that the gallant Lieutenant suffered the indignity of "palmies" with the "tawse." In 1803, the young soldier began his military career in earnest, joining the 75th Regiment, of which his father had been commanding officer, and proceeded to India, participating in the siege of Bhurtpore, where the 75th lost two-thirds of its officers and men. Later, Gray went through the Peninsular war, being engaged at Barossa, at the terrific siege and capture of Badajos, at the passages of the Bidassoa and the Nivelle, at Orthez, Tarbes, and Toulouse, twice being wounded. As aide-de-camp to his uncle, General Johnstone, Gray, now captain, served through the brief campaign in Flanders, which culminated in the battle of Waterloo. Thereafter, further service in Bengal affecting his health brought him to Australia with the rank of lieutenant-colonel, and with his land grant as a retired officer he took land on the Hastings River, in New South Wales, where he resided till appointed police magistrate at Gladstone. Queensland was fortunate in starting with numerous men of this stamp in positions where their example helped to mould the manners and to affect the ideas of the colonists as they arrived. Their influence can still be appreciably felt in the tone and habits of Queenslanders. It is true that the instances in which they or their immediate descendants have acquired wealth are exceptional. The tradesman, the expert mechanic, the yeoman, and the labourer, when endowed with natural abilities, easily beat the man with hereditary disposition to spend rather than to save money, in the race for wealth. But the classes, so distinct in the old world, in the new colony have blended easily, and in the blending have in general combined the gentle's contempt for meanness with the trader's business instinct, so essential in communities where, with few exceptions, every man is under the necessity of carving his own fortune.

The real influx of population commenced after Queensland became a separate colony, with a Governor, Legislature, and Ministry of its own. From about 1860 onwards immigration was vigorously promoted. Inducements in the way of free passages for impecunious people of both sexes and of an approved stamp—that is to say, of respectability vouched for by persons of station in the places whence they came—were made widely known in Great Britain and Ireland. To persons who defrayed the moderate cost of their own passage from

Europe, land-orders, available for purchase of available lands in country and suburban parts, were issued. The late Henry Jordan was dispatched to Great Britain as immigration agent, and was eminently successful, as was also a colonist of German nationality, in that portion of Europe. The civil war in the United States, producing the depredations of cruisers under the Confederate flag, by which the mercantile marine of the Union was effectively driven from the seas, an immense number of beautiful clipper ships were sold very cheaply to British shipowners, and used for the conveyance of emigrants to Australian ports. There were almost weekly arrivals of such vessels in Moreton Bay, swift ships of a tonnage ranging from 1,000 to 1,200 tons, and carrying on the average about 300 passengers, classified as saloon, second cabin, intermediate, and steerage. But this classification, dependent as it was simply on the amounts which the passengers had been in a position to pay for their accommodation—the steerage people being mostly carried free—had slight endurance, once

the passengers had landed. The opportunities which offer themselves in a colony where society is as yet only in a state of first development, produce the most extraordinary transitions in people's condition. Energy, steadfastness in industry, frugality, natural aptitude for perceiving chances and selecting them, here prevail with certainty over mere old-world distinctions of station. The man with a handicraft is the immigrant who gets ordinarily the earliest start in the new environment. The agricultural, or the common labourer, even the small tradesman, or dealer, who knows how to traffic in commodities, has an advantage over the individual who simply is ready to do anything because he is expert in nothing. After a few years it generally happens that the gentlemen of the saloon, having spent the few score or odd hundreds of pounds which they had possessed for a start, are working on even terms with those of their shipmates who landed with nothing save strong arms, stout hearts, and expertness at some industry or business. But individuals do not in-



The late Colonel Gray.

variably follow the occupation which had been theirs in the country they left. Natural proclivities get fair play in a new community, and often influence permanently the direction in which men address their energies. Among immigrants it constantly happens that after a few years, or a long series, the last in degree during the voyage are become first in the colony, and the first have become last. The following examples, vouched for by a gentleman who was himself a passenger, of the careers, as far as traceable without special research, of a number of the immigrants by one vessel, will serve to illustrate the manner in which novel surroundings and fresh opportunities and liabilities subvert the primary conditions of new arrivals. The passengers by this ship comprised about eighteen young men and one young lady, travelling with her brother, in the saloon, and nearly 300 men, women, and children distributed in second cabin, intermediate, and steerage. Among the

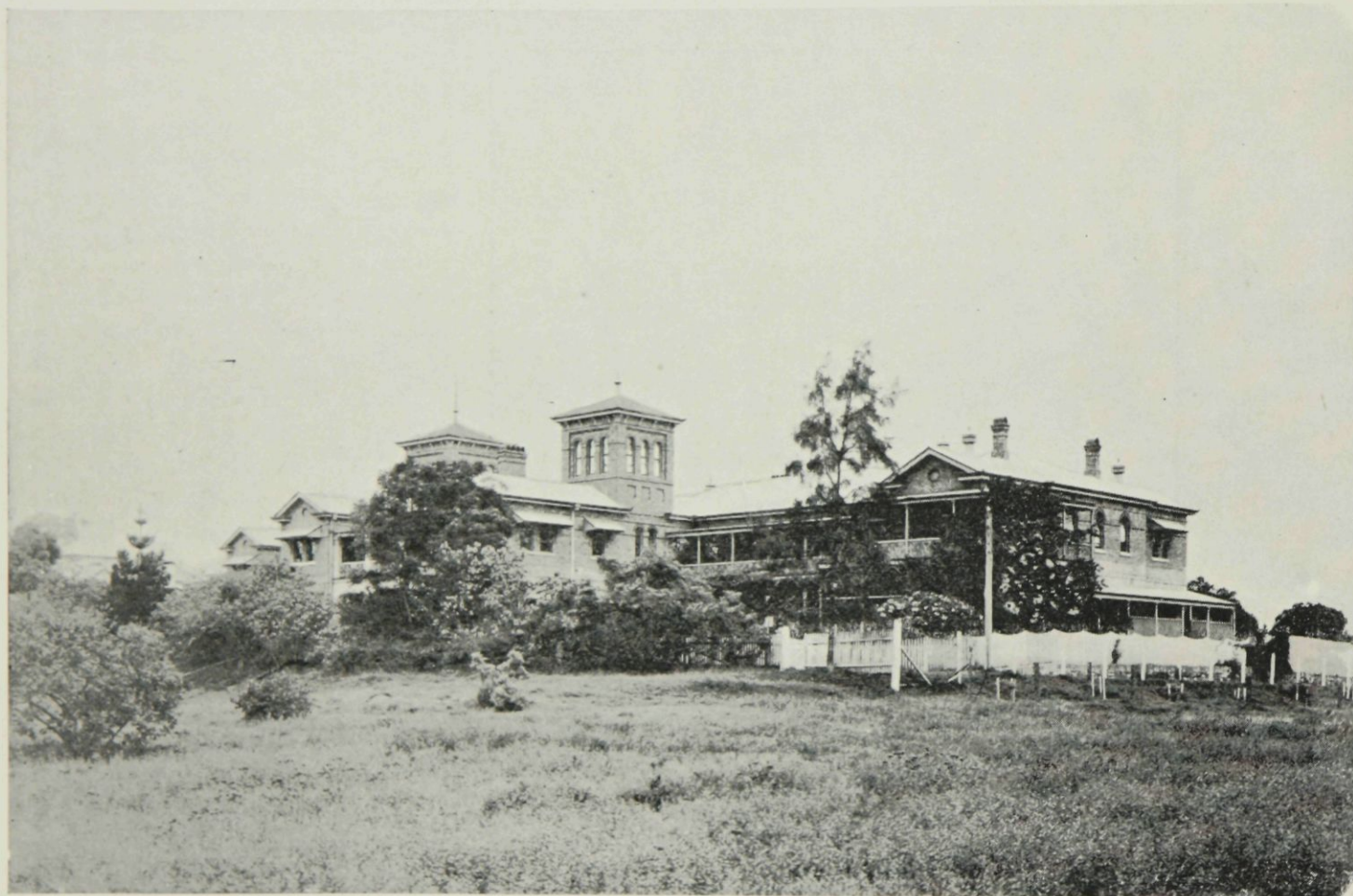


young fellows in the saloon, one was son of a noble ambassador of high distinction, and grandson of a duke. Another was son of a colonel of old Scottish family, and nephew of a great field marshal of more recent date. A third was son of an English baronet. A fourth was a barrister; a fifth a physician and surgeon, medallist of a great university. Another came from Canada, where he had held a commission in a militia regiment; yet another was the heir to an ancient Scottish lairdship, and had been educated for the Indian army. There were the son of a naval officer, of a Yorkshire yeoman farmer, and a balance were of well-to-do business families. Most of them had some small sums of money, either in drafts or awaiting them at Brisbane, and several had expectations or reversions more or less considerable. In the other classes, antecedent rank, present monetary resources, and future expectations were naturally on a descending scale. On board emigrant ships during the voyage sundry small functional positions

fellow, bought a vehicle and horses as soon as he had looked around him, and started up country as a hawker. Later he returned to the old country. The scion of a ducal house after a while was entrusted with large sums of money for investment in a sheep station, conducted the business with noble lavishness, lost every penny, and also beat a retreat. The colonel's son became a State school teacher. The "laird" became a journalist. Others, after varying fortunes, are lost sight of in the rank and file of the population. But, on the other hand, the second cabin, intermediate, and steerage contributed to the colony some men successful beyond the average. "Jimmy Ducks," resorting with an early "rush" to one of the goldfields, had a bit of luck, which, as it proved, was all that he needed to call forth latent business judgment more than ordinary. He speculated with sense, and invested with prudence, and ere long became and remained a wealthy man and a leading burgher of the locality he made his home. The schoolmaster rose to be proprietor

of an extensive jewellery establishment. Positions of considerable importance are held by others of the immigrants in the Government service. One or two worked themselves into possession of runs of their own, and many are now substantial tradesmen and yeomen on their own freeholds in different parts of the colony.

While Great Britain and Ireland contributed copiously to the population of Queensland, and continue to send in a steady, although latterly diminished, stream of new settlers, Germany has not been the only part of the continent of Europe where recruits to the colonial population have been sought.



Immigration Depot, Brisbane.

are distributed among such of the passengers as are qualified, are willing, or under necessity to accept same. Thus, as schoolmaster for the children, a steady, quiet man, a working jeweller by trade, earned some slender allowance; and at perhaps the very foot of the social ladder aboard, one handy fellow attended to the poultry in the coops, and was known by the soubriquet of "Jimmy Ducks."

Without entering too minutely into the personal careers of each individual, it may be stated that of the saloon passengers not one achieved and maintained any considerable substantial success. Some had been "ne'er-do-wells" in the old country, and came to grief almost as soon as they attempted to govern their own careers. One of the young professional gentlemen was heard of working as a navvy, road-making; another fell a victim to drink, although a practice worth £1,000 a year had been put in his way. The baronet's son, a steady

From the Scandinavian nations of the north some contingents have been introduced, and, although their transference from cold climates to one of semi-tropical temperature involves an entire readjustment of all their ideas so far as agriculture is concerned, they have proved excellent colonists, have adapted themselves with singular aptitude to their novel surroundings, and number strongly among the prosperous settlers in country localities. From Tasmania also, shortly after the separation of Queensland from New South Wales, a considerable influx of young men, scions of the official class in that island colony, where at the time prospects of satisfactory careers were not apparent, flocked to Queensland, seeking, and often finding, openings in the Government departments which were being organised, and constituting valuable additions to the population.

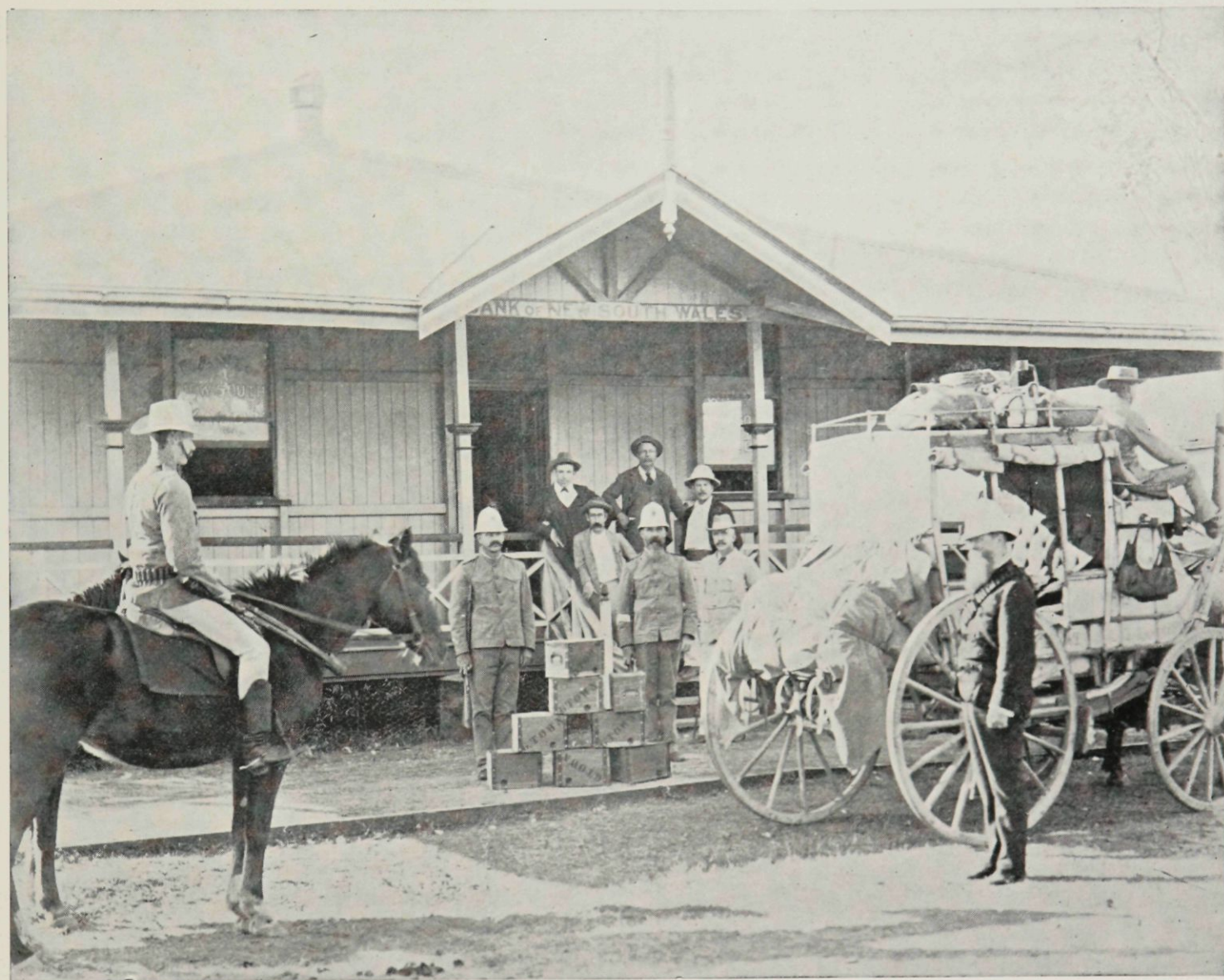


The system of assisted immigration from Europe has been persisted in, with few intermissions, and still continues. It is but lately that emissaries, despatched at Government expense, have visited Great Britain and even Italy, where it is considered that most useful colonists may be procured among the rural population, inured to habits of frugality by long-continued local conditions, and expert in many branches of semi-tropical rustic industry, handed down by practice and tradition from times even antecedent to the period of the Romans when Virgil embodied so much information relating to agriculture in his "Georgics," treatises which may still be read with some advantage by cultivators in countries where climatic conditions resemble those prevailing in Italy.

A population thus originated might reasonably be expected to develop tendencies for orderly prosecution of industry, and to exhibit aversion from predatory practices and violent crimes. On the other hand, it might be anticipated that the very scattered and sometimes exceedingly isolated situations of groups and individuals of the population might produce temptations in persons of evil propensities to commit crimes which they would hope could never be detected. Something of this has indeed happened, but only in a comparatively mild form. Theft of cattle, sheep, and horses are crimes more common than in communities where such stock are closely confined and carefully tended. Against this, however, must be set off the comparative paucity of the crimes of cities. Bushranging, the exemplary crime of Australian settlements, has never

been of any frequency in Queensland. Like brigandage, it is a practice which requires some degree of sympathetic population. There is none such, and never has been any, in Queensland. About a quarter of a century ago, one hair-brained young stockman in the Maranoa district did take to the bush in emulation of the famous bushrangers—the Ben Halls and Gilberts—of N. S. Wales. But he had no sooner bailed up and robbed one set of travellers than the country rose against him. Every station in the vicinage sent forth its two or three crack horsemen, adequately armed. "The Wild Scotchman," as the bandit proclaimed his *nom de guerre* to be, was a dashing horseman and smart bushman. But he was pursued by men who considered themselves fully his match in all respects. The police troopers had no lack of assistants in scouring the country. But it fell to the lot of a small party of civilians to catch sight of the bushranger, who sought to escape by reckless galloping through rough country. In vain: a desperate gallop over any sort of country is just what a young bushman enjoys, and often got in those

days before the universal use of wire fencing has hemmed in straggling cattle and brumby horses. Man-hunting is a more blood-quickenning sport than fox-hunting. The Wild Scotchman was "rounded up" and brought to bay. He flung himself behind a tree, and opened fire on his pursuers, who promptly outflanked and surrounded him. Now a man who has a tree bole for shelter cannot get "behind" on three or four sides at one time. The Wild Scotchman surrendered, was duly brought to trial, convicted, and a death sentence commuted to a long term of imprisonment. He served his time, and on being released became a steady member of society, dying at Hughenden recently quite a respected townsman, notable during his later years chiefly as the possessor of a remarkably stentorian voice.

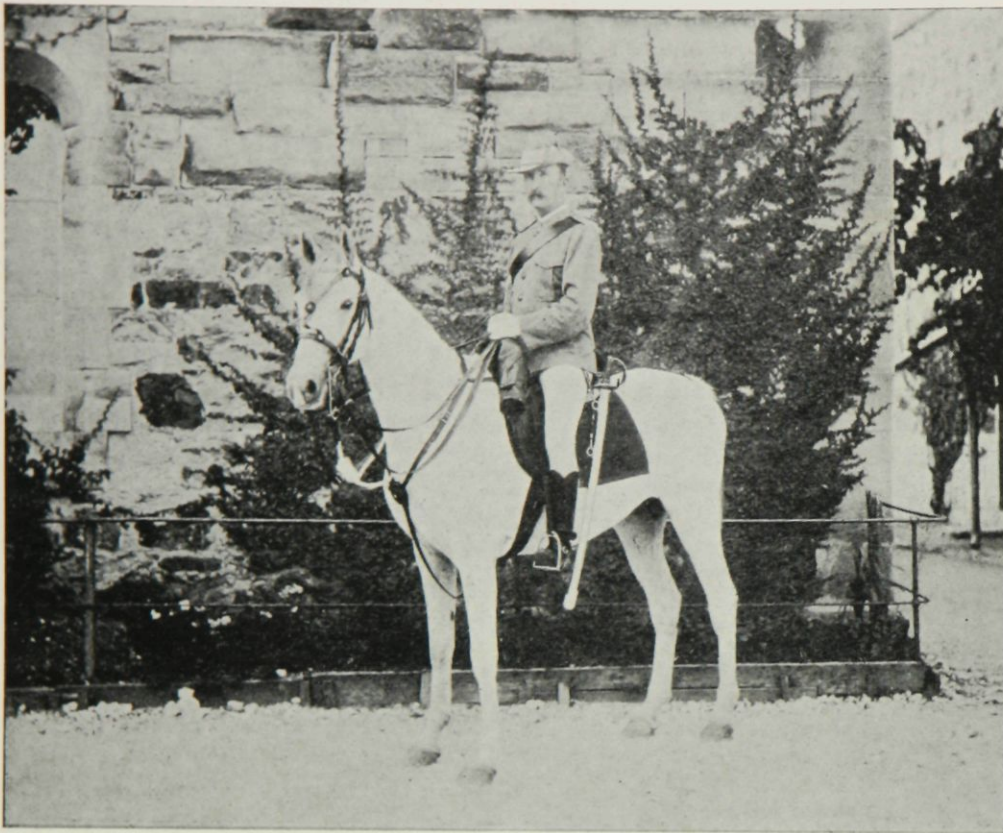


Gold Escort.

Another crime which the circumstances of the colony might be expected to produce is the robbery of gold while in transit from mining centres to the security of banks in the coastal towns. During the first year of mining at Gympie, in 1868, when the place swarmed with a crowd of thousands of adventurers from all parts of Australasia, the coach conveying a quantity of gold from the diggings to Maryborough was "stuck up." But the perpetrators were swiftly brought to justice, and since that incident preventive measures have deprived that form of depredation of attractiveness. From the fields which are remote from railway communication, large quantities of gold, collected in the first instance by local banks and storekeepers, are periodically despatched by packhorse, or more generally by coach, coastward. These treasures are now invariably accompanied by an escort of mounted and armed police, who, in the event of camping-out being necessary *en route*, or no sufficiently secure place of deposit, such as a storekeeper's safe being available *en route* during a halt for the



night, set regular guards. These precautions have sufficed, and such a thing, not uncommon in the early days of mining in the southern colonies, as a deliberate ambushade of and attack upon a gold escort is unknown in Queensland.



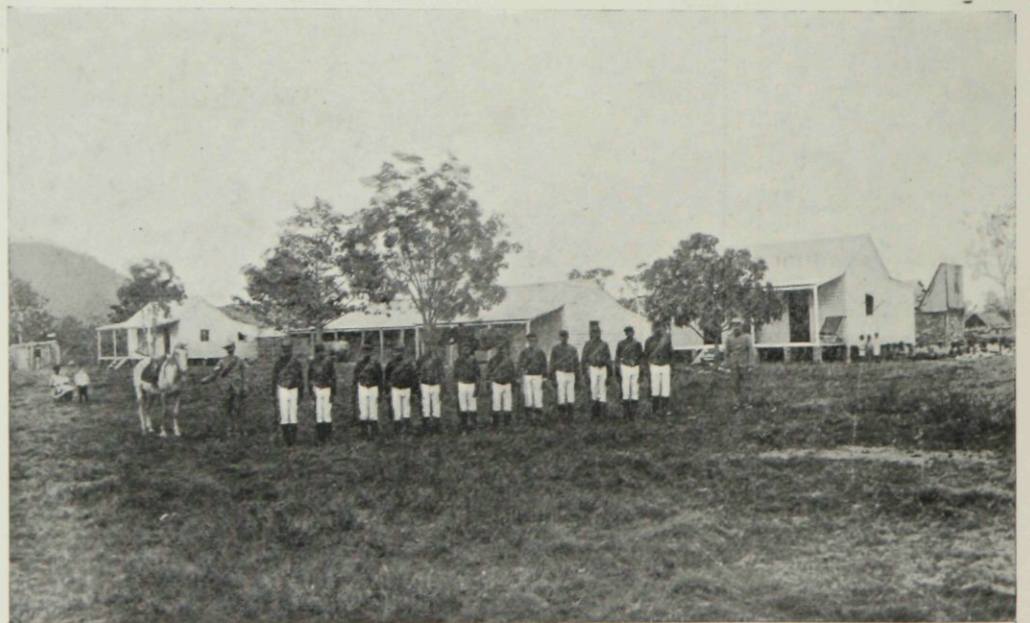
Mounted Constable in Parade Uniform.

In the metropolis and other principal towns the duties of the police are pretty nearly on the same lines as in cities in the old world. But the *personnel* of the force as a whole is in one respect distinctly different. Outside the towns, a policeman would be utterly incapable of service unless he could ride, and in the main the force may be regarded as a body of horsemen, dismounted for town work, but in country places invariably horsed, and well horsed, too. While unblemished antecedents are insisted upon, and fair educational acquirements stipulated for, excellence of horsemanship and familiarity with bushcraft are qualifications without which aspirants for admission to the force need scarcely hope for engagement. Accordingly it comprises a body of active men, including in its ranks some of the finest horsemen and smartest bushmen in the world. It is in isolated, outlying settlements that the merits and efficiency of this excellent force find best opportunities for development. There, apart from their duties as constables, their functions are, in many instances, of extraordinary multiplicity and variety. For such situations, a married man is ordinarily selected. He is furnished with a neat cottage, with stable and a couple of lock-up cells detached. Fodder for his horses, of which he has generally two of a good stamp, is allowed him. Within the village he is the preserver of peace and represser of any rowdyism. But he is also the representative of order for a wide tract of country all around, and not the least important of his functions is that of patrolling. This he accomplishes without parade. He makes himself familiar with every nook and obscure corner of his beat, and is to be encountered at most unexpected times and places. The swagsman, camping in a bend, ten miles from anywhere in particular, is sometimes surprised as the first gleams of the rising sun strike through the forest, by the approach of a horseman riding soberly up to his fire in the well-known uniform and caparisons

of the police, who will not disdain a pannikin of tea, a slice of damper, and a quiet chat. The trooper has himself been camped in a sort of ambush, not far off, for sufficient reasons known to himself and perhaps even at headquarters, and in no way connected with the swagsman.

Revolver and handcuffs are under his jumper, neither obtruding nor concealed. Thus, if he have an arrest to make, single-handed, in the most lonely spot, resistance is not a tempting prospect. Indeed, resistance to arrest even under such conditions is practically unheard of. In no part of the British dominions does the Queen's warrant run with more undisputed authority than in Queensland. In the extreme North indeed the wandering digger and traveller carries arms. But it is as security against the yet wild blacks of those frontier regions; not against his fellow-adventurers. With these exceptions, the population of Queensland is unarmed. If among a party of prospectors, miners, or diggers, working in some obscure gully or ridge remote from settlement, there chance to be a weapon, it will be a rifle to shoot kangaroos or wallabies, or a fowling-piece for 'possums or pigeons. No matter how lonely, how distant from other men, be the situation of a wanderer, be he struggling through the heart of a dense scrub, fifty miles from some small coastal plantation, camped in a ravine in Cape York Peninsula, or traversing the boundless plains of the Carpentarian country, he knows that the power of the law is over him, in protection as well as in restraint. There are, of course, perils appertaining to adventure—perils of famine, of flood, of disablement by accident or sickness, and of treacherous blacks—against which no public organisation can provide. But, apart from these, a man feels himself as safe in the wildest part of Queensland as he could in Kent or Fife, and safer than in Middlesex, where the professional criminals of a vast metropolis are ever lurking in search of prey.

The simple constable in a small bush township often discharges, in addition to his movements as a mounted trooper, such functions as those of acting mining commissioner, acting clerk of petty sessions, assistant district registrar of births and deaths, inspector of slaughtering houses; and the man who yesterday rode forty miles, and camped



Native Troopers.

out fireless in a dismal gully, in consequence of information received respecting disappearances of a squatter's bullocks or a selector's milch cows, to-day is to be found seated at a desk in an office of the court-house, receiving £50 or £60 cash with an application for mineral lease, or gravely recording the birth of a new Queenslander. On his



way to his quarters, the same officer will, passing a public-house, suggest to Bob Jones, who is too excited and is becoming noisy, the propriety of going home forthwith, and he will at the same time, while passing the time of day to the publican, unobtrusively take stock of a couple of strangers who had made their appearance in the township.

The colony is, in short, exceedingly well policed; surprisingly so, indeed, considering the huge area to be supervised and the scattering and constant movement of part of its population. The whole business is accomplished by a force less numerous than a single battalion. A total of 846, comprising 25 officers, 211 sergeants and corporals, and 610 constables, are all that are required. For the less settled regions—principally the Cape York and Carpentaria regions and the extreme

immigrants introduced from the Old World, sometimes with inadequate preliminary sifting, some proportion of “wasters” and criminals should be included; and it would be ridiculous to pretend that, from among the people of any community, no matter what their origin and antecedents, a proportion afflicted with predatory or violent instincts could be absent. All that can be asserted is that the population of Queensland is as law-abiding as those of the oldest and most settled countries of Europe. As in other places, society is occasionally shocked by the occurrence of some shocking crime, and it has not invariably been possible for the police to discover the perpetrators. The small detective force then comes in for a deluge of indignation, although, considering how disproportionate its numbers are to the population



Government House, with Police Escort.

West—aboriginals are employed as accessories to the white force, and are invaluable as trackers. In one or two places, small squads are stationed to impress, by frequent patrollings through the wildest regions, the untamed aborigines; but, generally, the men are attached by ones and twos to small stations where they, in addition to their usefulness as trackers, serve as handy assistants to otherwise solitary white constables. The degree to which the Police Force of Queensland is an equestrian body may be inferred from the fact that over 1,100 horses are maintained for its use, and the wide distribution of the officers, so as to keep the vast area of the colony under observation, is obvious when it is noted that there are 256 police stations in the territory.

It is not, of course, suggested that there is an absence of crime within the colony. It was inevitable that, among the thousands of

as compared with the same branch in older communities, its efficiency appears up to as high a standard as could be reasonably expected. The Police Force, broadly considered, consists chiefly of respectable and athletic men, excelling, and required to excel, rather in physical activity, horsemanship, and bush craft than in acute development of the subtler arts fitted to cope with the crimes of densely peopled countries, although those intellectual qualities are by no means lacking among the officers selected for the work of Criminal Investigation.

The dispensation of justice is arranged upon lines practically identical with those existing in Great Britain. Throughout the country leading residents are appointed to be Justices of the Peace. In the chief centres Stipendiary Magistrates are stationed, and preside over the Petty Sessions. District Court Judges preside over courts at



frequent intervals, dealing under a limited jurisdiction; and finally Judges of the Supreme Court sit to hear the most vital and important cases, criminal and civil; and it may be affirmed that the people of Queensland have as implicit confidence in the integrity of their judiciary as have the people of Great Britain in the decisions of the occupants of their highest tribunals. The [highest] legal dignities are now in the possession of Australians. The Chief Justice, Sir Samuel Griffith, is indeed a native of Wales, but came to this colony in his childhood. His education and his up-bringing have been exclusively Australian. Sent from Brisbane to Sydney, by his father, a leading minister of the Congregational Church, for extension of his Queensland schooling at the University there, he graduated with marked distinction, and on his return to Queensland, qualifying as a barrister and soon entering public life as a member of the Legislative Assembly, rapidly pushed his way to leadership alike at Bar and in Senate, becoming Premier at an unusually early age, and succeeding to the Chief Justiceship the late Sir Charles Lilley, himself an example of what can be achieved in this colony by unfriended ability. Mr. Lilley, an English emigrant, beginning his colonial career as an attorney's clerk, ran through very nearly the same ascending scale as his successor has done. Of the Puisne Judges of the Supreme Court, two ascended from Queensland schools and the Queensland Bar, one having actually qualified for the legal profession while as a youth working at the carpenter's bench, and another, although a member of the Inner Temple, is Australian born. Of the District Court Judges, one was an English barrister. The others were Queensland boys. The Petty Sessions are, as already mentioned, presided over in populous centres by stipendiary magistrates. The first generation who held these positions—chiefly gentlemen of the class and stamp of which Colonel Gray was an example—having passed away, the positions are to-day filled almost exclusively by Queenslanders who graduated upward through minor positions in the Civil Service, such as Clerkships of Petty Sessions, and maintain the fine traditions of their predecessors.

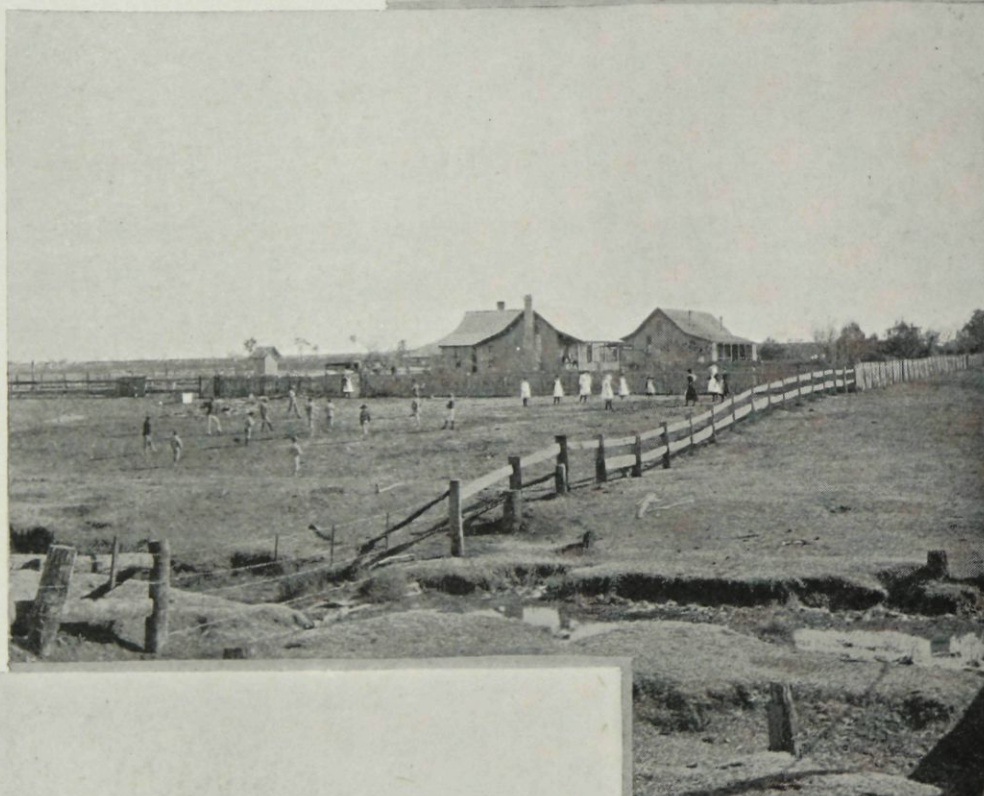
The unpaid magistracy is a body of more miscellaneous *personnel*. The position of Justice of the Peace is easily acquired by individuals who have made themselves effectively active in election campaigns. Happily, it is not confined to that class, however, as the duties and obligations are freely imposed, also, upon members of the community who have achieved local influence and respect.

Australian colonists have ever been most earnest in a determination that, remote though they be from the centres of scientific and literary activity, and scattered although the population must be, owing to the nature of their avocations, the rising generation shall not suffer any deprivation of the essentials of civilised education. In Queensland, from the earliest days of its history as a home for free colonists, there

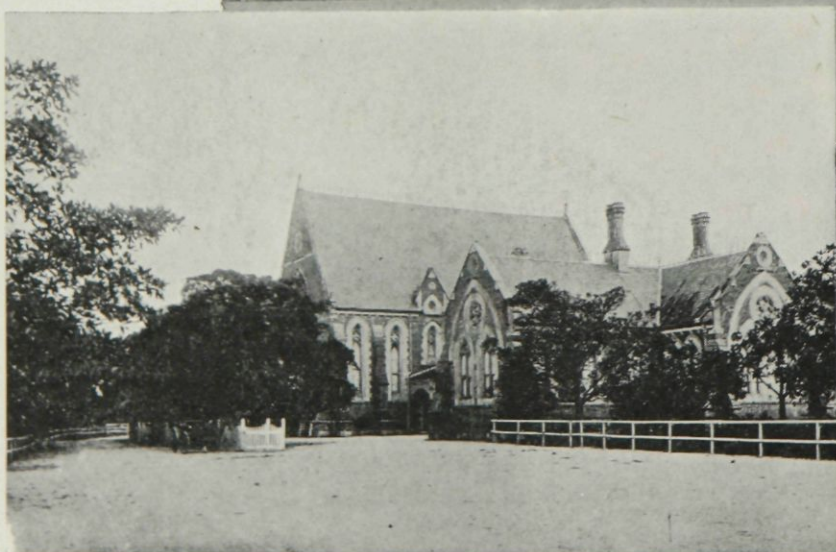
has been ungrudging expenditure in providing schools and teachers wherever settlement even in very tiny groups has located itself. For some years after separation from New South Wales, the Queensland Department of Public Instruction exacted, in accordance with enactment, a small weekly fee for each pupil in State schools from parents.



GIRLS' GRAMMAR SCHOOL, BRISBANE.



A COUNTRY SCHOOL.



BOYS' GRAMMAR SCHOOL, BRISBANE.

is to say, beyond such broadly Christian teachings as is embodied in school books framed on the lines of the famous compromise in the Irish national school system, no sectarian or dogmatic religious instruction enters into the curriculum of the public schools. The Roman Catholic Church has never acquiesced in this system, and, as in the other Australian colonies, strives to maintain schools of its own. But the conditions of settlement in Queensland are such that even the Government Department of Public Instruction, with the liberal

financial support yearly voted by Parliament, finds it a matter of no small difficulty to provide a school for the common benefit of all settlers in all the thousand little groups of pioneers. Hence it is beyond the resource of any one denomination, however earnest in its desire to minister to the children of its members, to accomplish much outside the principal towns. The extent to which this anxious care



that no Queensland child shall lack the advantages of at least primary education is carried may be understood by the fact that, wherever in each of two neighbouring localities there are children sufficient to

numerous and wealthy to justify the establishment of a local University, and it is possible that, ere long, Government taking the lead, provision will be made for a Brisbane University.

Meanwhile the provision for education consists of a teaching staff of 1,507 individuals, inclusive of 542 pupil-teachers. The number of the sexes is nearly equal. The number of pupils on the school rolls is (close of year 1899) 92,120, for whose accommodation there are Grammar Schools for boys and for girls at Brisbane, Ipswich, Rockhampton, and Maryborough, and for boys only at Toowoomba and Townsville; 412 State Schools with daily attendances ranging from 30 up to 800; and 429 Provisional Schools, which are maintained for little groups of pupils, numbering from as few as a dozen up to a score or somewhat more.

While the education provided in the ordinary course is thus sufficient to start every young Queenslander with at least those rudiments of knowledge which can be cultivated to a splendid growth of learning, if there be a natural disposition, the State is not unmindful of the advantages of rendering available avenues to specialised information for students of mature years. Institutions for the inculcation of technical information of varied useful kinds exist in many of the principal towns, and draw support from public funds.

But perhaps the most noteworthy efforts in that direction are exerted towards the training of young men for agrarian careers. Even the older farmers are not neglected, and, for their special behoof, experimental farms have been created in different regions in the



State School, Rockhampton.

furnish an average daily attendance of six pupils, what is styled a "half-time provisional school" is established at each. Such schools are worked in pairs under a single teacher, who devotes half his time to each school. These are at the bottom of the scale, which rises in proportion to the numbers of pupils to be educated. Next in order come provisional schools, where population has centred, it may be temporarily, as in the case of a small mining rush, in sufficient density to furnish an adequate number of children—that is to say, one dozen. In such case the residents apply for the establishment of a school, and, as a sort of guarantee of good faith, have to undertake to defray one-fifth of the expenditure for equipment and maintenance.

Provisional schools, in turn, as population in any place increases and settlements become unmistakably permanent, grow into regular State schools, with an average daily attendance of not less than thirty pupils. In addition to these, the State grants subventions to Grammar Schools, to which parents of easy circumstances send their children—for there are Grammar Schools for girls as well as for boys, but to which also pupils of distinguished merit in the ordinary public schools may win their way, by the aid of bursaries, without expense to their parents. Similarly another stage may be gained by students who successfully aim higher, and "exhibitions" enabling them to attend at a University are provided partly by the State and partly by private donators and legacies. As yet Queensland has no University, and such pupils have the option of resorting to any recognised University to continue their studies, whether in the sister colonies, in Great Britain, or the continents of Europe or America. It is considered that the community has become about sufficiently



State School, Townsville.

colony. It is not, of course, designed that the farmer and grazier shall suspend the operations on their holdings by which they maintain themselves, and become resident students on State Experimental



Farms. But visits from them are expected and welcomed, and for their general advantage all sorts of experiments in tillage, in cultivation, in times and seasons for planting, in treatment of different soils, in manures—in short, in every moot point or novel application connected with husbandry and with stock-breeding—are conducted. These attempts, the progressive indications, and the results and financial profit or loss, are published and circulated in an *Agricultural Journal*, an official monthly magazine, procurable by farmers and others at very trifling cost compared with the value of the information given and to the expense attendant on its issue.

But a separate and particular reference is deserved by the Agricultural College. Situated about a mile from the railway station at Gatton, in the valley of Lockyer's Creek, a tributary of the Brisbane River, about 36 miles from Ipswich, the College buildings are erected on a rising ground, and overlook the area set apart for the uses of the establishment, and which comprises 1692 acres of the forest country common in this part of Queensland. Greater variety of soil

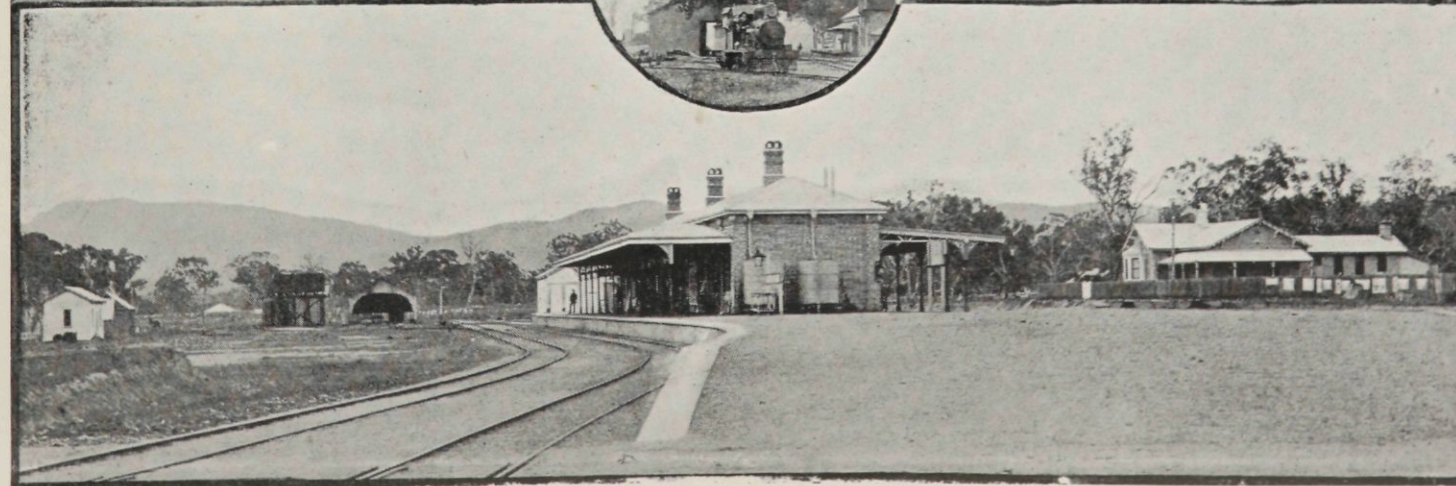
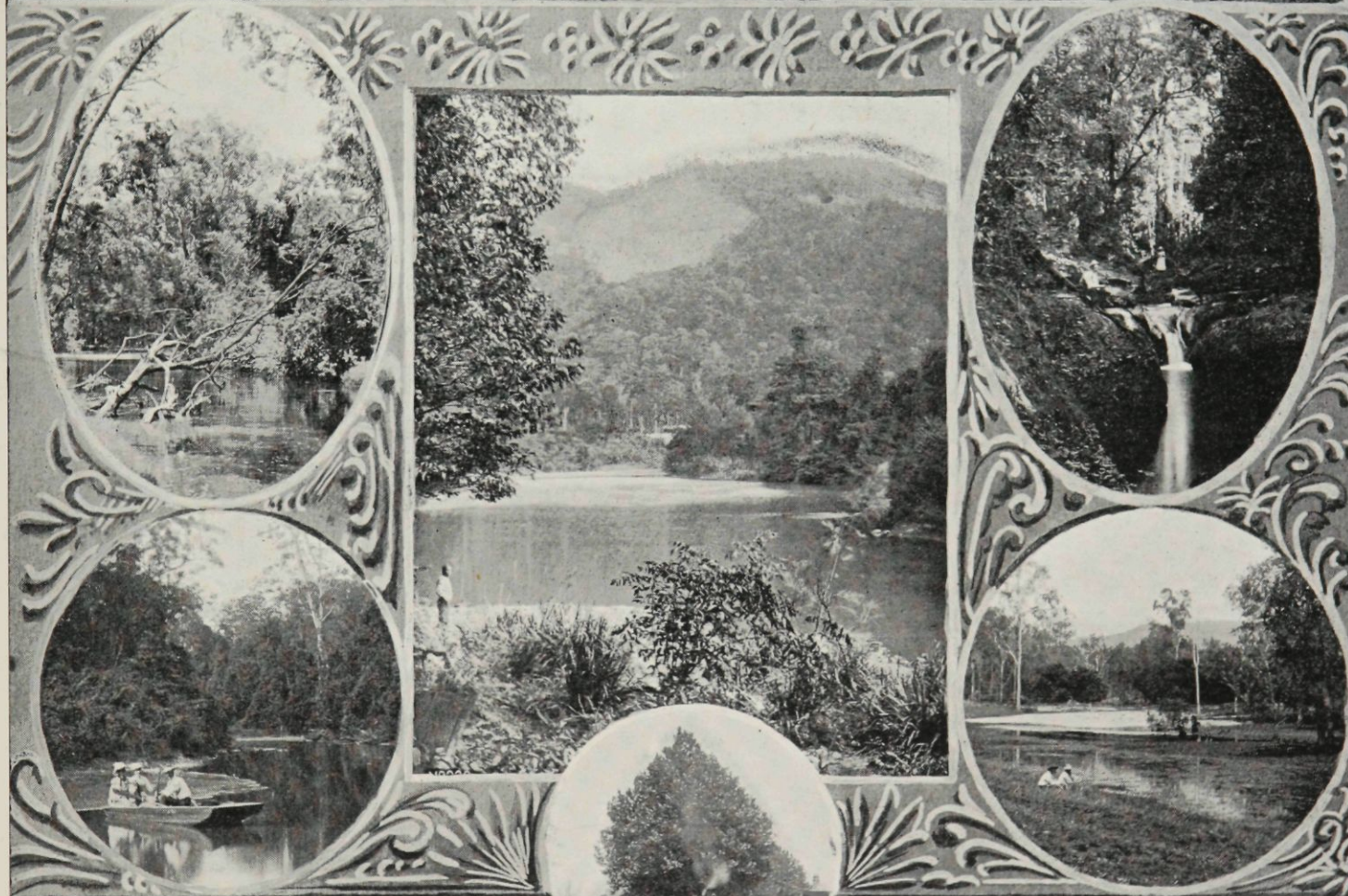
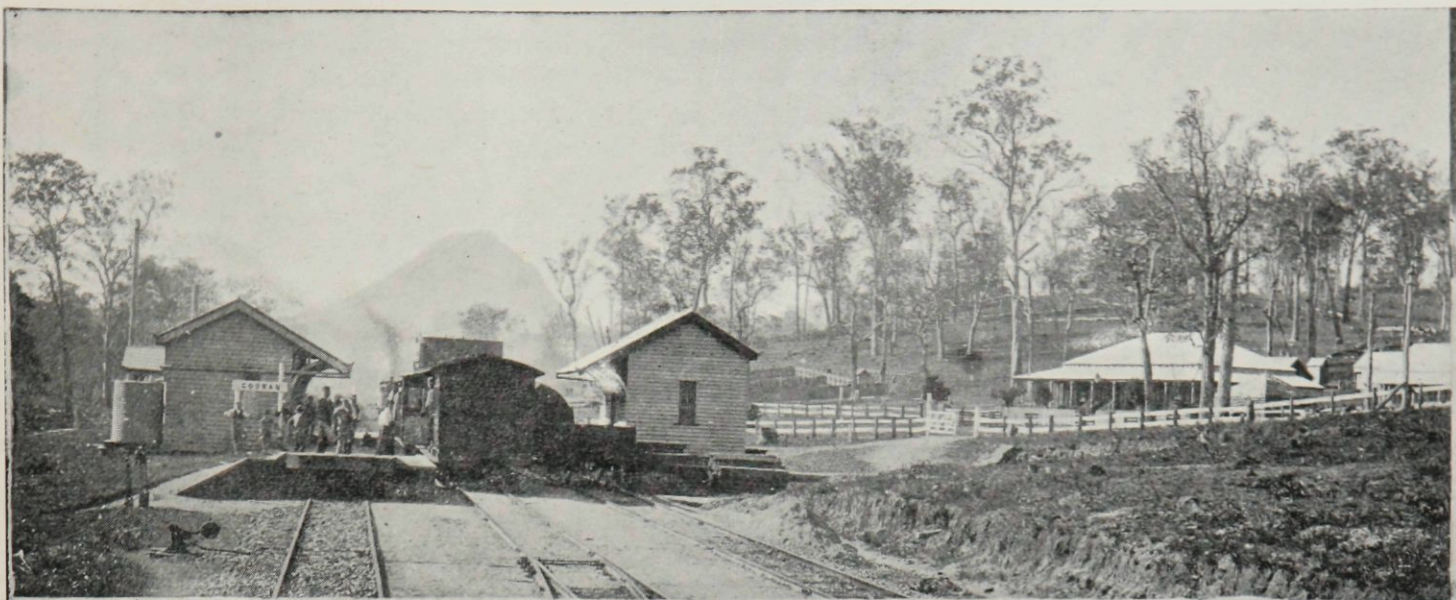


State School, Mount Morgan.



and diversity of surface might be wished for, for experimental purposes. As a rule the land is heavy, with only sufficient slope to secure effective draining. Along the course of Lockyer's Creek, however, several hundred acres of very deep, black, rich alluvium give an alternative, and a sandstone ridge which intrudes and divides the farm into nearly equal portions enables demonstration to be given of what is possible in dealing with comparatively poor and light land with clay substratum. The farm and college buildings, centrally situated on this ridge, and by assisting in the erection of some of which the students obtained practical insight into construction, comprise a fine administrative building, residences for teachers and dormitories for students, of whom in 1899 there were forty-six. In addition there are the usual structures belonging to the business of farming, workshops, modern dairying premises, and sheds for the indoor recreation of the young men, such as gymnastics. While all the studies are designed to train the pupils for the practice of Agriculture in such wise that each one who faithfully attends to the full course of instruction shall be a sort of

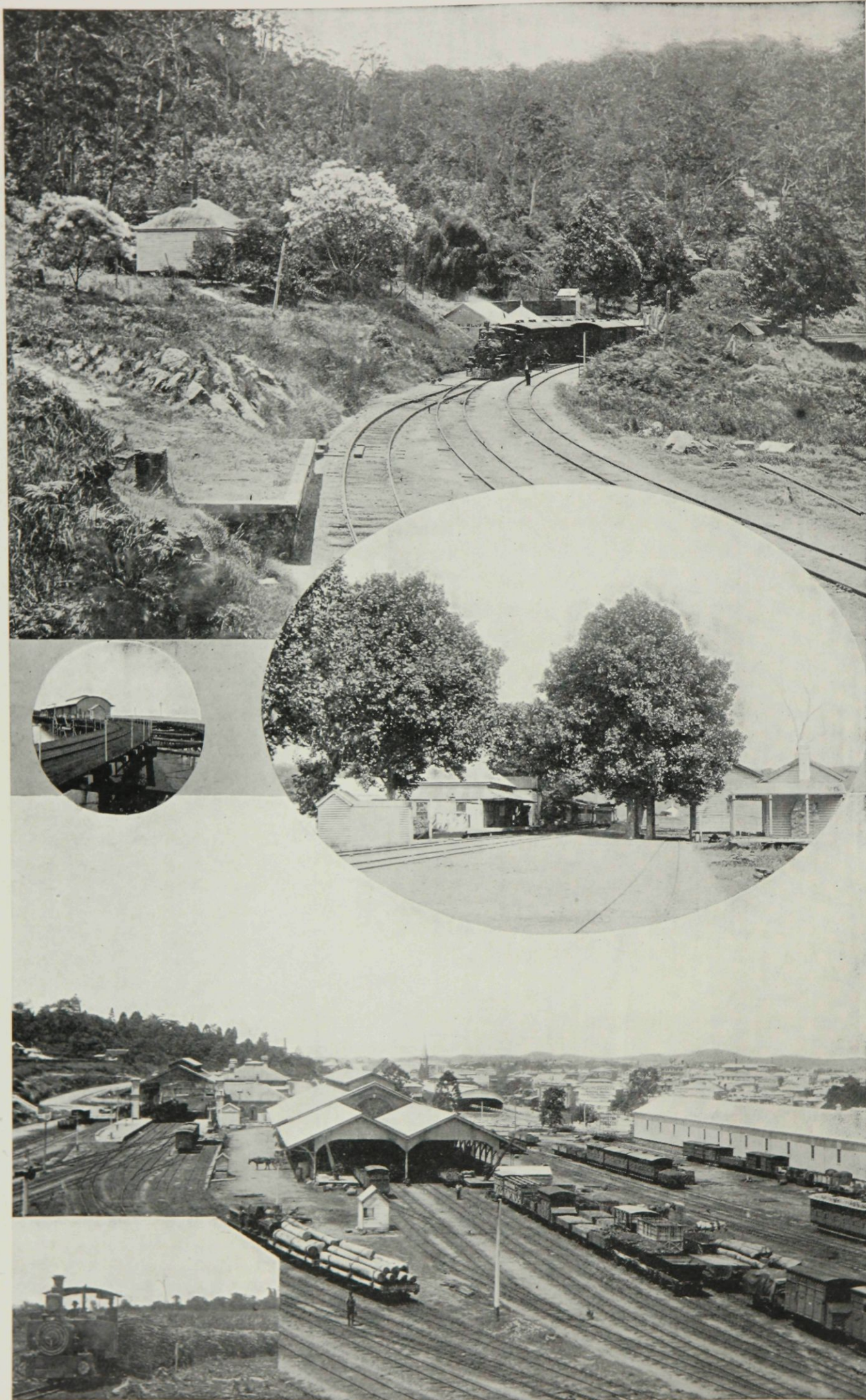




COORAN.

WALLANGARRA.





1. SPRING BLUFF.

2. GRANCHESTER RAILWAY STATION.

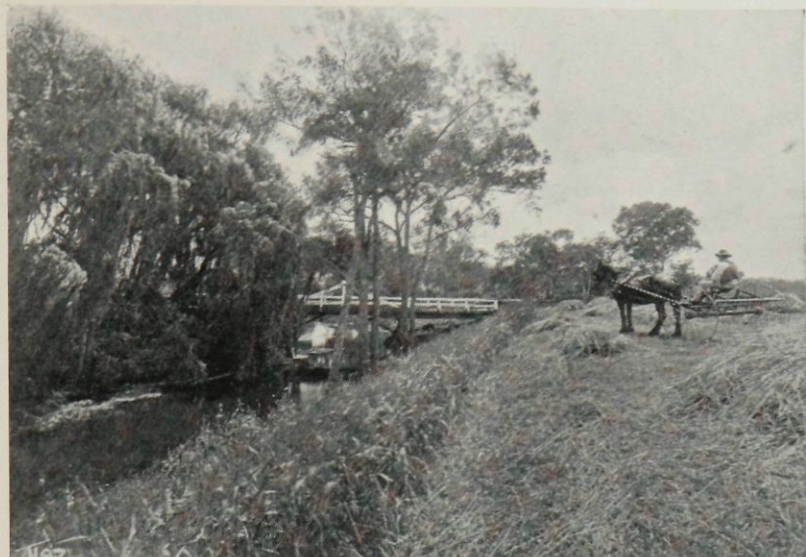
3. ROMA-STREET RAILWAY STATION, BRISBANE.

4. A CANE TRAIN.



missionary of agrarian methods and knowledge adapted to the conditions prevailing in Queensland, their scope is very comprehensive.

The period which it is arranged students shall devote to the full course is three years, with two terms in each year. At the outset the pupil is required to master arithmetic, to make a beginning in the study of botany, zoology, and to give some attention to English



Near Warwick.

composition. In the second term physics, mensuration, bookkeeping, drawing, and veterinary science are added to his tasks. In his second year elementary chemistry is added to his tasks in the first term, followed in the second by an advance to practical chemistry, horticulture, surveying, and levelling. In the third year, he advances to organic chemistry and laboratory work, and in the last term this is specialized to agricultural chemistry, while bacteriology and stockbreeding find a place in his finishing course.

These are, however, only the indoor or classroom portions of his studies. From the first the students are set to practical work in the field, the forest, the stables, the byre, the dairy, the carpenter's shop, the orchard, the vineyard, the apiary, and so forth. It is indeed found, in practice, that the inclinations of the youths turn decisively in those directions in sharp preference to scientific, theoretical, and literary or clerkly work indoors. Judging by remarks made by Mr. Mahon, the Principal of the College, in his report on its working during 1899, a very sensible discretion is exercised in dealing with this preference. The Principal's own opinions are so well expressed that they may be given here: "A difficulty I had to meet was the opinion held by many students, and apparently in some instances by their parents, that a short time at the College was sufficient for a maximum amount of knowledge, and the evident desire of some parents that their sons, with but a limited education, should take up subjects that are distasteful to them, and which they can never hope to master. The College course covers so many subjects that it would require more than ordinary intelligence for a student to become proficient in each and all branches during a residence of three years. It would seem to be ill-advised on the part of those responsible for the future of the youngsters who come here to be taught, to endeavour to force the knowledge to be gained within the limits of a given time, for the consequences are detrimental to the student and to the College. It were wiser for those who only intend to remain, say, a year to devote the whole of that time to one subject and learn it thoroughly. Another argument against the many-subject

course is the fact that some boys have an unconquerable dislike to or inability for bookwork, and at the same time have a great liking and ability for fieldwork. In these cases, to force lads, whose intention is to pass their lives as farmers, to undertake what is to them a hopeless drudgery, is a sheer waste of time, and almost amounts to cruelty. Acting upon this hypothesis, I have during the past year, the acquiescence of parents being previously obtained, initiated a system of special work, under which students devote themselves to particular kinds of work. The system has been found to work well; indeed, in connection with the dairy course it has worked too well, for, this being a favourite occupation, the applications have been greater than the capacity of the dairy, and the consequent ability of the instructor to give proper attention to, and to do justice to, his pupils. The result on this point (for the dairy will only admit of a class of ten at a time) has been that it has been necessary to refuse applications for the dairy course, and students have left the College for that reason, instead of awaiting their turn and in the meantime acquiring knowledge in other branches that would have been useful even to them as dairymen, should it have been their intention to devote themselves exclusively to that pursuit.

"Notwithstanding that the indoor work is made as plain and attractive as possible by the teachers, the inclination of all students, excepting a small minority, is towards practical work; and, though this preference might well be encouraged with first and second year men, I am of opinion that for third-year men the theoretical and scientific teaching should be insisted upon, because the practical knowledge previously gained, combined with the theoretical and scientific instruction, will finish that course which the College ought to impart to those whose intention it is to follow agriculture, and who have, for that purpose, spent three years of their lives to gain that knowledge. Scientific and theoretical knowledge will not alone suffice for the farmer, and from my experience it would seem that those who have only attained that knowledge invariably endeavour to become teachers, and will not risk their training or prove their knowledge by becoming farmers. Science, theory, and practice should go hand in hand. The latter may stand by itself, and thrive after a manner, but the two



Experimental Wheat Farm.

former will fall unless accompanied by practice. It is upon this basis that it is my intention to conduct the agricultural education of those who trust themselves to my guidance."

The Principal has the co-operation of a resident staff, a teacher and assistant teacher of chemistry, a licensed surveyor, a University



graduate for science, together with practical overseers for the farming, gardening, and mechanical operations, while instruction is also given by visiting professors in botany, in viticulture, and so forth.

For all the advantages of such instruction, as well as for board, residence, lighting, and washing, the charge has been fixed at the remarkably low figure of £25 per annum; while, further, to ensure that the College course shall be available for the sons of settlers who are still battling for substantial fortune, contingent expenses are kept rigidly within the most moderate proportions, £1 for medical fee and an equal sum for recreative outlays being all that are required on entry. For students who do not board, the charge for the curriculum is even more strikingly low, a couple of pounds per annum being all that is exacted.

Experimental State Farms at Hermitage near Warwick, and Westbrook near Toowoomba, both on the Darling Downs; at Biggenden in the Burnett District, about 54 miles inland from Maryborough, and close to Degilbo, a place where agricultural settlement is in its earliest stages, but



Palms in Scrub, Gympie Line.

where natural conditions give promise for the early future of an extensive settlement whose pioneers will, in due course, achieve as solid prosperity as has rewarded the selectors of the Moreton Districts; and at Gindie, on the railway branch from Emerald to Springsure, about 170 miles inland from Rockhampton; an experimental nursery at Kamerunga near Cairns, and at Mackay; and an orchard at Redland Bay, an indentation of Moreton Bay—are among the secondary establishments by means of which the State endeavours to assist the industries connected with utilisation of the soil.

The railways of Queensland are the property of the State, and upwards of twenty millions sterling of the public debt of the colony has been incurred and expended for their construction and equipment. At the time when Separation from New South Wales was effected there was not one mile of railway in the territory, and the introduction of this means of communication engaged the attention of the first Queensland Ministry. To connect the Darling Downs with the seaboard was the first and obvious need. The influence of the parliamentary representatives of



View on the Brisbane-Gympie Railway.



Ipswich and the West Moreton district prevailed in a determination that the starting point should not be the capital, Brisbane, but the highest navigable point on the tributary of the Brisbane River, the Bremer, where Ipswich is situated. The very grave responsibility of deciding what should be the gauge of this first railway—a decision almost necessarily governing all subsequent extensions or other lines—had to be borne by the Ministers and Legislators of that time. Influenced partly by an example set by New Zealand, a width of 3 feet 6 inches was adopted, and an engineer who had successfully supervised the construction of a line of that description in New Zealand was secured as Engineer-in-Chief to survey the course and superintend the construction of the proposed Queensland railway. The task was one calling for considerable talent, as in order to reach the objective it was necessary to discover a route and to devise a method for climbing the steeply scarped seaward face of the Main Dividing Range, from whose summit, 2000 feet above sea-level, the plateau of the Darling Downs sloped gently westward. About 1500 feet of the ascent was crowded into a distance of but a few miles, as the crow flies, but by an ingenious system of oblique ascent, following the contours of the spurs which buttress the face of the mountain range, the problem was solved, although the distance was lengthened by a score of miles. This one section of railway sufficed to satisfy the colonists that the decision to reject the wider gauges adopted by Victoria and by New South Wales had been remarkably judicious, considering the financial circumstances of a meagre population in a new country. Thenceforward the 3-foot 6-inch gauge has been the standard width for all railways in this colony, satisfying every reasonable requirement for a fairly rapid and a thoroughly reliable means of conveyance for passengers and freight, while ensuring economy in cost.



Off Inland—A Camel Caravan.

South Wales at 4 feet 8½ inches would be arrived at by a simple calculation of proportion. This, however, is far from being the case. It is not merely in dimensions of cuttings and embankments, width of bridges, length of sleepers, weight of rails, and amount of ballast, that differences exist. In surveying a route for a railway the adoption of the shorter curves permitted by the narrower wheel-base gives extraordinary advantages. Obstacles can be avoided by sharp detours, the track can be twisted round this cliff-face or that ravine, and by such and similar facilities miles of distance saved between two points. The earlier railways in Queensland were far more costly than have been lines of more recent construction over similar country. Thus from Brisbane to Gowrie Junction on the Darling Downs, a stretch which includes the section first undertaken and the formidable ascent of the Main Range, the cost per mile averaged £20,759, a rate never since approached save in one instance, presently to be particularised. The level tract from Gowrie to Charleville, 121 miles, where the railway, like "swift Camilla, skims the plain," averaged only £1895 per mile, while the average cost per mile of all the railways in Queensland, a fraction over 2800 miles, has been but £6178 per mile.

The inhabitant of Great Britain is likely to imagine that in this remote dependency, the occupation of which by colonists had scarcely commenced in earnest half-a-century ago, the people have, as contrasted with their stay-at-home brethren in the



Railway Station, Charters Towers.

Few except professional railway engineers or persons who have had occasion to give the subject special attention—amongst whom most pioneer Queenslanders may be included—understand in how

mother country, a very insignificant proportionate provision of railroads. It must surprise many to learn that in reality the contrary is the fact. The United Kingdom, with a population of over 40 millions, has for their



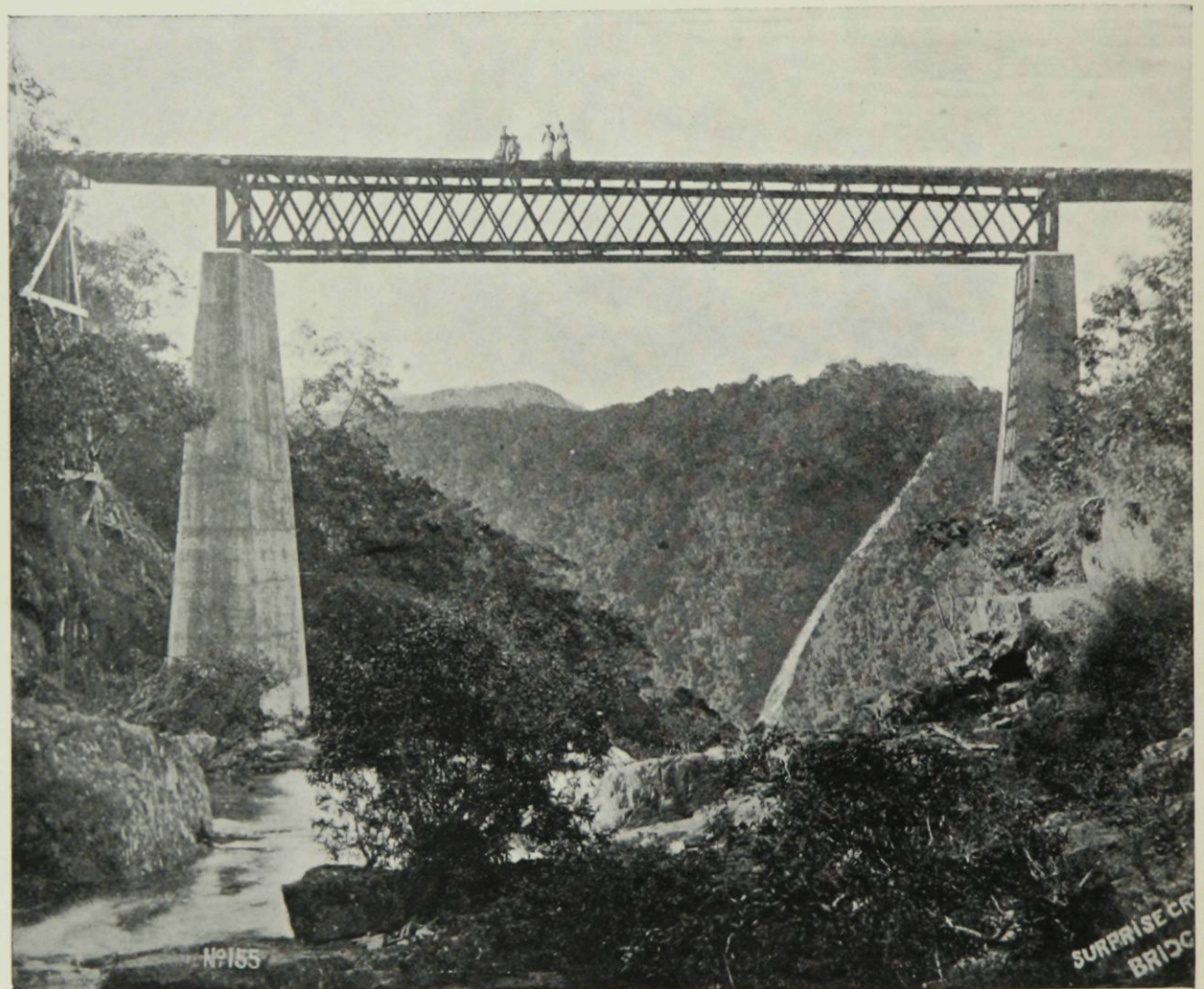
convenience a little less than 22,000 miles of railways. In Queensland, with a population little exceeding half-a-million—that is to say, about one-eightieth of the population of the British Isles—a proportionate railage would be about 274 miles. The actual mileage in Queensland is 2801 miles, only about 10 miles short of the lines of railway in New South Wales, where the British gauge of 4 feet 8½ inches has been adopted, and the cost of construction has been just about double that of the Queensland lines—viz., £38,477,269 against £19,320,902.

The distribution of the convenience of railway transit in Queensland has been on the whole unusually judicious, especially considering that political influence has been a potent factor in determining which localities should be benefited by the construction of a railway. The pastoral influence has had sufficient sway to secure long extensions of railway from the more populous settlements of the seaboard districts towards the Western interior country, where men and women are comparatively few, but sheep and cattle numerous. But on the whole the people of the colony have not been opposed to these trunk lines. It has been generally agreed that not only the interests of the holders of runs in the far interior are advantaged by the construction of such railways, although the trains run for hundreds of miles over plains and downs where few signs of human occupation break the monotony, and sheep and cattle are the only living creatures visible in the landscape, but the general interest of the colonists is served by the provision of ready access to and from these expanses of rich soil. It is remembered that not many years have elapsed since the aspect presented to the traveller, viewing the Darling Downs through the window of a railway carriage, was very similar, where to-day that part of the country, beginning to be parcelled out among agriculturists and pastoralists on the smaller scale, offers a cheering prospect of bustling industry and ever-multiplying homesteads.

The more peopled parts of the colony along the seaboard have, after all, secured the greater or closer distribution of railways. The folly of having the main Southern and Western system of railways terminate towards the ocean, in a little pool more fit for a duckpond than for a haven for ocean-going shipping, at the head of a narrow, shallow, and crooked canal such as the Bremer Creek actually is, long ago became obvious, and the railway was extended from Ipswich to the metropolis, whence, more recently, as well as from Ipswich itself, numerous offshoot lines, serving settlements in the East and West Moreton districts—the most populous within the colony—have been thrust out.

In New South Wales, the aggregation of an inordinate proportion of that colony's population in Sydney, the capital, concentrating there a preponderance of political power and pecuniary interest, had so shaped the railway policy of that colony that, except to Newcastle, a port not far distant, no railway runs to any other seaport along the whole long eastern seaboard. A consequence of this is that localities two, three, and even four hundred miles distant from Sydney, although within a hundred miles or less from a harbour, are constrained to send all their produce by rail to the metropolis instead of being enabled to avail themselves in part of the cheaper resource of water-carriage.

This condition has operated, and still operates, to hamper and even to arrest the progress of industrial settlement in many parts of eastern New South Wales, where natural fertility would otherwise reward the cultivator with affluence. Queensland has happily been spared the evils of a similar misapplication of railway conveniences. Three main trunk lines start for the interior from three distinct ports, at about equal distances along the seaboard. The first and earliest of these is that already mentioned, with Brisbane for its principal seaward station, and ramifications which extend in one main branch westerly to Charleville, about halfway towards the interior boundary of the colony, and thence south to Cunnamulla, pointing towards a possible future junction with the New South Wales railway which stretches from Sydney to Bourke. From the neighbourhood of Toowoomba another main line from this trunk system diverges southward at Gowrie Junction, on the Darling Downs plateau, and strikes through Warwick



Surprise Creek, Cairns Railway.

and Stanthorpe for the New South Wales border, whereon, at Wallangarra, it connects with the New South Wales line, leading to Sydney, and thence linked to the Victorian and South Australian lines to Melbourne, Adelaide, and the secondary towns of the southern colonies.

Another trunk line, starting from Rockhampton, likewise penetrates far into the interior at Barcaldine and Longreach, again reaching about halfway towards the western boundary of the colony. It throws out limbs, north and south from Emerald, extending to Clermont on the one hand and to Springsure on the other. Yet a third system has Townsville for its seaport terminus, and, trending somewhat south of west, penetrates, by way of Charters Towers, the famous mining township, and Hughenden, a pastoral town, to Winton, a village named after the smart lieutenant who participated in the attempt to form a settlement at Gladstone, as narrated in another part of this work, and placed pretty nearly in the geographical centre of the Colony.



A commencement was made with what might have been, and indeed may yet become, a fourth line, issuing from Cairns on the coast at the base of Cape York Peninsula, and designed to open up the rich tableland of the Herberton district—rich in soil, in minerals, and in timber, and, owing to its elevation, blessed with a climate not common in a latitude so far within the tropics—and thence possibly to proceed to the gold-fields of which Georgetown is the business centre, and possibly even to meet the one line which begins on the shores of the Gulf of Carpentaria, at Norman-town, and ends at Croydon. Such extensions would cut across the base of Cape York Peninsula, and substitute for a sea voyage of upwards of 1000 miles a railway journey of little more than 300.

But the difficulties encountered in making a railway up the face of the coast range, which immediately at the back of Cairns rises abruptly, involved expenses in construction so unprecedented that the responsible authorities became alarmed, and, when the crest of the range had been attained, made a definite pause, as if to regain breath and recover from financial palpitations. This bit of railway work, 47 miles in length, cost over £26,000 per mile. The range here, as elsewhere along this part of the Queensland coast, approaches near to the sea, and rises with great abruptness, clothed with a dense mantle of magnificent timber and matted jungle, gashed with deep and precipitous ravines and gorges, and defended with out-works of protrusive spur-ridges, all contributing to make the conquest of such battlements one not to be achieved without a flow of cash from many wounds.

Nevertheless the rampart was stormed and a lodgment effected in the enciente before the assailants rested from the attack. What remained to be accomplished to carry out the original plan of campaign was comparatively easy and capable of being effected at moderate cost. It is now, in part, carried forward a stage by private enterprize, legislative sanction having been given some time ago for the construction of an extension of this line to the Chillagoe neighbourhood by a company which only awaits the completion, now near at hand, of their railway to work mines owned by them in that locality, where it is known that mineral deposits, copper predominating, are multitudinous, and it is believed that some are of immense value.

Several more lines of rail or tram, to be constructed by private enterprize, under legislative sanction, are projected for different parts of the colony. The sanction of the Legislature has, however, yet to be secured. The Ministry and a majority of members of the representative Chamber favor such proposals, which, however, are opposed

with determination by the minority in the Legislative Assembly, which represents the political organizations of the laboring classes in the colony.

In this rapid summary of the principal lines of railway in Queensland, we have overleaped a multitude of minor or shorter lengths, and have not mentioned the important stretch of rail which, from Nerang, near the N.S. Wales border, to Gladstone, runs parallel with and not very remote from the coast line, passing through Brisbane, Gympie, Maryborough, and Bundaberg *en route*, and designed presently to be extended over the short gap between Gladstone and Rockhampton. Maryborough is the coastal starting point of small short branches, striking into the Wide Bay and Burnett Districts. From Cooktown,

a short line strikes inland towards those Palmer Gold Fields which a score of years ago gave employment to 20,000 diggers, on the alluvial wash.

The foregoing pages, devoted mainly to explanation of the illustrations reproduced from photographs from the collections of Government departments, might tend, in the absence of explanation, to convey an impression that the colonists of Queensland are all engaged in directly developing the natural resources of that territory. A community so occupied would, almost necessarily, be one of a very primitive cast, and liable to be deficient in respect of those intellectual qualities and expansions of ingenuity, and even in respect of the social amenities, which are fostered by pursuits less primitive. Thus far we have portrayed almost exclusively a population of pastoralists, agriculturists, and miners. It might almost be imagined that there is here in Queensland no place for people of any other classes. A few sentences may, therefore, be usefully employed in dispelling any such erroneous impression. That a large proportion of the male population devotes its ener-



Stewart's Creek.

gies to those primary industries which constitute the only solid basis of prosperity for any nation or community, is true. The fact must also be regarded as eminently satisfactory by every one who comprehends the philosophy of history and has even a glimmering sense of the true foundations of sound national greatness. Production is infinitely more important than barter. Even manufacture, which includes human exertion, strengthens a community immeasurably more than commerce, which often traffics mainly in commodities produced and wrought in foreign countries. Venice, a *congeries* of palaces and warehouses on barren sandbanks, and Genoa, a mere seaport town, attained indeed power as well as wealth by commerce alone. But each sank, never to rise again, under a single blow. They were, to

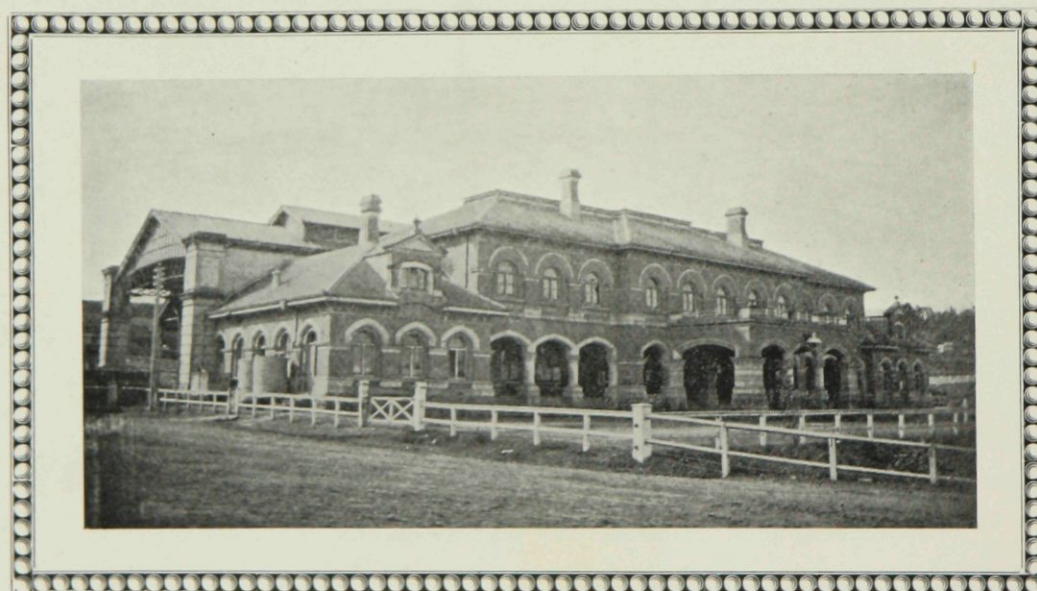


provinces, what a bank is to a farm. Once broken, a bank is extinguished; a farm may be devastated by droughts, immersed under floods, ravaged and pillaged by armies; but when the rain falls, when the flood subsides, when the troops withdraw, it is again as productive as before. Queensland is a farm, a mine, a meadow, a forest, and in some slight degree also a factory. Her future is assured by the circumstances that her soil is unexhausted, her mineral wealth barely touched, her pastures, despite periods of drought, appreciating, and her manufactures in a condition of progressive development.

Although our collection of photographs does not comprise any illustrative of private establishments, it is necessary to state that the population includes individuals engaged in most of the avocations usual in civilized communities. Tradesmen, mechanics, shopmen, clerks, all have their place, ministering to the requirements of the primary producers. Of engineering establishments there are many, and some of very considerable extent, the Government railways, the mines, and

the sugar plantations supplying custom. There is a woollen mill at Ipswich; breweries are numerous; factories for the preparation of tobacco, the manufacture of boots, clothing, and vehicles abound. Jams and meat are tinned and preserved. In short, most of the familiar industries of Great Britain here exist on a scale proportionate to the population. That population is indeed all too small for progress and development of resources so immeasurable as so vast a territory presents. But it constantly expands, partly by voluntary immigration of people attracted to it by the comparatively easy conditions of life, partly by a system of State-aided immigration, and partly, of course, by the excess of births over deaths, favoured by a climate as wholesome as it is genial. Writing with a personal experience extending over forty years of Australian life, chiefly in Queensland, it is with a conscientious conviction of the appropriateness of the term that we have applied to this fecund territory the title

"A QUEENLY COLONY."





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